

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds
(without alignments)
11150.034 Million cell updates/sec

Title: US-09-285-306-1
Perfect score: 705
Sequence: 1 ccagagagtgaggcgatc.....ggcgatcgacgcggcgacgt 705

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA:*
1: /cgn2_6/prodata/1/ina/5A COMB.seq:*
2: /cgn2_6/prodata/1/ina/5B COMB.seq:*
3: /cgn2_6/prodata/1/ina/6A COMB.seq:*
4: /cgn2_6/prodata/1/ina/6B COMB.seq:*
5: /cgn2_6/prodata/1/ina/PCTUS COMB.seq:*
6: /cgn2_6/prodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	705	100.0	706	3	US-08-797-812-24
2	697.4	98.9	4403765	3	US-09-103-840A-2
3	697.4	98.9	4411529	3	US-09-103-840A-1
4	626.8	88.9	970	1	US-08-250-030-1
5	626.8	88.9	970	5	PCT-US95-06790-1
6	620	87.9	620	2	US-08-757-653-135
7	620	87.9	620	2	US-08-757-653-138
8	620	87.9	620	3	US-08-520-946-135
9	620	87.9	620	3	US-08-520-946-138
10	620	87.9	620	4	US-09-655-378A-135
11	620	87.9	620	4	US-09-655-378A-138
12	618.4	87.7	620	2	US-08-757-653-136
13	618.4	87.7	620	2	US-08-757-653-137
14	618.4	87.7	620	2	US-08-757-653-139
15	618.4	87.7	620	2	US-08-757-653-140
16	618.4	87.7	620	3	US-08-520-946-136
17	618.4	87.7	620	3	US-08-520-946-137
18	618.4	87.7	620	3	US-08-520-946-139
19	618.4	87.7	620	3	US-08-520-946-140
20	618.4	87.7	620	4	US-09-655-378A-136
21	618.4	87.7	620	4	US-09-655-378A-137
22	618.4	87.7	620	4	US-09-655-378A-139
23	618.4	87.7	620	4	US-09-655-378A-140
24	546.4	77.5	3447	2	US-08-313-185-57
25	546.4	77.5	3447	3	US-08-313-185-57
26	452.2	64.1	706	3	US-09-082-614A-57
27	385.4	54.7	5099	4	US-09-887-052-21

28	383.8	54.4	5099	4	US-09-887-052-3	Sequence 3, Appli
29	383.8	54.4	5099	4	US-09-887-052-5	Sequence 5, Appli
30	360.4	51.1	4227	4	US-09-902-540-8919	Sequence 8919, Ap
C 31	360.4	51.1	9367	4	US-09-902-540-951	Sequence 951, App
C 32	356.8	50.6	4074	4	US-09-252-991A-4737	Sequence 4737, Ap
33	356.8	50.6	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
34	333.4	47.3	432	2	US-08-313-185-59	Sequence 59, Appl
35	333.4	47.3	432	3	US-09-082-614A-59	Sequence 59, Appl
C 36	318	45.1	4083	4	US-09-489-039A-22	Sequence 22, Appl
37	318	45.1	4206	4	US-09-489-039A-30	Sequence 30, Appl
38	261.6	37.1	329	3	US-08-750-088A-34	Sequence 34, Appl
39	261.6	37.1	329	3	US-09-722-319-34	Sequence 34, Appl
40	255.6	36.3	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
41	254	36.0	3612	4	US-09-583-110-973	Sequence 973, App
42	254	36.0	3651	4	US-09-107-433-1652	Sequence 1652, Ap
43	252.4	35.8	2964	4	US-09-540-236-1097	Sequence 1097, Ap
C 44	252.4	35.8	14672	3	US-08-961-527-111	Sequence 111, App
45	252.4	35.8	31063	4	US-09-596-002-20	Sequence 20, Appl

ALIGNMENTS

RESULT 1
US-08-797-812-24
; Sequence 24, Application US/08797812
; Patent No. 6228575
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas A.
; APPLICANT: Mack, David
; APPLICANT: Chee, Mark S.
; APPLICANT: Berno, Anthony J.
; APPLICANT: Stryer, Lubert
; APPLICANT: Ghandour, Ghassan
; APPLICANT: Wang, Ching
; TITLE OF INVENTION: Chip-Based Species Identification and
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/797,812
; FILING DATE: 07-FEB-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/017,765
; FILING DATE: 15-MAY-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/629,031
; FILING DATE: 08-APR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/012,631
; FILING DATE: 01-MAR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/011,339
; FILING DATE: 08-FEB-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Fitts, Renee A.
; REGISTRATION NUMBER: 35,136
; REFERENCE/DOCKET NUMBER: 16528X-018550
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-326-2400
; TELEFAX: 415-326-2422

; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 706 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-797-812-24

```
Query Match      100.0%; Score 705; DB 3; Length 706;
Best Local Similarity 100.0%; Pred. No. 2.3e-153;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGAGGCGCATCACACCGCAGACCGTTGATCAACATCCGCGCGGTGGTTCGCGG 60
DB 2 CCCAGGACGTGAGGCGCATCACACCGCAGACCGTTGATCAACATCCGCGCGGTGGTTCGCGG 61
QY 61 CGATCAAGGAGTCTTTCGGCACCGACCGACGCTGAGCCAAATTCATGACACAGAACACCGCG 120
DB 62 CGATCAAGGAGTCTTTCGGCACCGACCGACGCTGAGCCAAATTCATGACACAGAACACCGCG 121
QY 121 TGTCCGGGTGACCCACAGCGCGGACTGTTCGGCGCTGGGGCCCGCGGTCTGTCAACGTG 180
DB 122 TGTCCGGGTGACCCACAGCGCGGACTGTTCGGCGCTGGGGCCCGCGGTCTGTCAACGTG 181
QY 181 AGCGTCCCGGCTGGAGGTCCCGGACGTGCACCCGTCGCACCTACCGCGCGGATGTGCCCGA 240
DB 182 AGCGTCCCGGCTGGAGGTCCCGGACGTGCACCCGTCGCACCTACCGCGCGGATGTGCCCGA 241
QY 241 TCGAAACCCCTGAGGGGCCAAACATCGGTCGTGATCGGCTCGCTGTGCGTGTACGCGCGGG 300
DB 242 TCGAAACCCCTGAGGGGCCAAACATCGGTCGTGATCGGCTCGCTGTGCGTGTACGCGCGGG 301
QY 301 TCAACCCGTTCCGGTTCATCGAAACCGCGTACCGCAAGGTGGTTCGACGCGCGTGGTTAGCG 360
DB 302 TCAACCCGTTCCGGTTCATCGAAACCGCGTACCGCAAGGTGGTTCGACGCGCGTGGTTAGCG 361
QY 361 ACGAGATCGTGTACCTGACCGCGGACGAGGAGACCGCACCTGTGTGGCACAGGCCAAATT 420
DB 362 ACGAGATCGTGTACCTGACCGCGGACGAGGAGACCGCACCTGTGTGGCACAGGCCAAATT 421
QY 421 CGCCGATCGATCGGACGCTCGCTTCGTCAGCCGCGCGTGTGTCGCGCCGCAAGGCGG 480
DB 422 CGCCGATCGATCGGACGCTCGCTTCGTCAGCCGCGCGTGTGTCGCGCCGCAAGGCGG 481
QY 481 GCGAGGTGAGTACGTGCGCTCTGAGGTGGACTACATGACGCTTCGCGCCCGCCAGA 540
DB 482 GCGAGGTGAGTACGTGCGCTCTGAGGTGGACTACATGACGCTTCGCGCCCGCCAGA 541
QY 541 TGGTGTCCGTGGCCACCGCGATGATTCCTTCTGAGGACGACGACGACGACGACGACGACG 600
DB 542 TGGTGTCCGTGGCCACCGCGATGATTCCTTCTGAGGACGACGACGACGACGACGACGACG 601
QY 601 TCATGGGGGCAACATGACAGCCGAGCGGTGCGCTGCTGCTGAGGAGGCGCCCGCTGG 660
DB 602 TCATGGGGGCAACATGACAGCCGAGCGGTGCGCTGCTGCTGAGGAGGCGCCCGCTGG 661
QY 661 TGGGCACCGGGATGGAGCTGCGCGCGGCGATGACGCGGCGACGT 705
DB 662 TGGGCACCGGGATGGAGCTGCGCGCGGCGATGACGCGGCGACGT 706
```

RESULT 2

US-09-103-840A-2
; Sequence 2, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TUBERCULOSIS

; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn ver. 2.1
; SEQ ID NO 2
; LENGTH: 4403765
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; FEATURE:
; OTHER INFORMATION: CDC 1551
; OTHER INFORMATION: "n" bases at various positions throughout the sequence
; OTHER INFORMATION: represent a, t, c or g
US-09-103-840A-2

```
Query Match      98.9%; Score 697.4; DB 3; Length 4403765;
Best Local Similarity 99.9%; Pred. No. 6.7e-151;
Matches 698; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGAGGCGCATCACACCGCAGACGTTTGATCAACATCCGCGCGGTGGTTCGCGG 60
DB 762963 CCCAGGACGTGAGGCGCATCACACCGCAGACGTTTGATCAACATCCGCGCGGTGGTTCGCGG 763022
QY 61 CGATCAAGGAGTCTTTCGGCACCGACCGACGCTGAGCCAAATTCATGACACAGAACACCGCG 120
DB 763023 CGATCAAGGAGTCTTTCGGCACCGACCGACGCTGAGCCAAATTCATGACACAGAACACCGCG 763082
QY 121 TGTCCGGGTGACCCACAGCGCGGACTGTTCGGCGCTGGGGCCCGCGGTCTGTCAACGTG 180
DB 763083 TGTCCGGGTGACCCACAGCGCGGACTGTTCGGCGCTGGGGCCCGCGGTCTGTCAACGTG 763142
QY 181 AGCGTCCCGGCTGGAGGTCCCGGACGTGCACCCGTCGCACCTACGCGCGGATGTGCCCGA 240
DB 763143 AGCGTCCCGGCTGGAGGTCCCGGACGTGCACCCGTCGCACCTACGCGCGGATGTGCCCGA 763202
QY 241 TCGAAACCCCTGAGGGGCCAAACATCGGTCGTGATCGGCTCGCTGTGCGTGTACGCGCGGG 300
DB 763203 TCGAAACCCCTGAGGGGCCAAACATCGGTCGTGATCGGCTCGCTGTGCGTGTACGCGCGGG 763262
QY 301 TCAACCCGTTCCGGTTCATCGAAACCGCGTACCGCAAGGTGGTTCGACGCGCGTGGTTAGCG 360
DB 763263 TCAACCCGTTCCGGTTCATCGAAACCGCGTACCGCAAGGTGGTTCGACGCGCGTGGTTAGCG 763322
QY 361 ACGAGATCGTGTACCTGACCGCGGACGAGGAGACCGCACCTGTGTGGCACAGGCCAAATT 420
DB 763323 ACGAGATCGTGTACCTGACCGCGGACGAGGAGACCGCACCTGTGTGGCACAGGCCAAATT 763382
QY 421 CGCCGATCGATCGGACGCTCGCTTCGTCAGCCGCGCGTGTGTCGCGCCGCAAGGCGG 480
DB 763383 CGCCGATCGATCGGACGCTCGCTTCGTCAGCCGCGCGTGTGTCGCGCCGCAAGGCGG 763442
QY 481 GCGAGGTGAGTACGTGCGCTCTGAGGTGGACTACATGACGCTTCGCGCCCGCCAGA 540
DB 763443 GCGAGGTGAGTACGTGCGCTCTGAGGTGGACTACATGACGCTTCGCGCCCGCCAGA 763502
QY 541 TGGTGTCCGTGGCCACCGCGATGATTCCTTCTGAGGACGACGACGACGACGACGACGACG 600
DB 763503 TGGTGTCCGTGGCCACCGCGATGATTCCTTCTGAGGACGACGACGACGACGACGACGACG 763562
QY 601 TCATGGGGGCAACATGACAGCCGAGCGGTGCGCTGCTGCTGAGGAGGCGCCCGCTGG 660
DB 763563 TCATGGGGGCAACATGACAGCCGAGCGGTGCGCTGCTGCTGAGGAGGCGCCCGCTGG 763622
QY 661 TGGGCACCGGGATGGAGCTGCGCGCGGCGATGACGCGGCG 699
DB 763623 TGGGCACCGGGATGGAGCTGCGCGCGGCGATGACGCGCG 763661
```

RESULT 3

US-09-103-840A-1
; Sequence 1, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:

```
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      98.9%; Score 697.4; DB 3; Length 4411529;
Best Local Similarity 99.9%; Pred. No. 6.7e-151;
Matches 698; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACGTTGATCAACATCCGGCCGGTGGTCCGCG 60
DB 761003 CCCAGGACGTGGAGGCGATCACACCGCAGACGTTGATCAACATCCGGCCGGTGGTCCGCG 761062

QY 61 CGATCAAGGAGTTCTTCGGCACCAGCAGTGAAGCAATTCATGGACGAAACACCCGC 120
DB 761063 CGATCAAGGAGTTCTTCGGCACCAGCAGTGAAGCAATTCATGGACGAAACACCCGC 761122

QY 121 TGTCCGGGTTGACCCACAAGCGCGACTGTCGCGCTGGGGCCCGCGGTCTGTACAGTG 180
DB 761123 TGTCCGGGTTGACCCACAAGCGCGACTGTCGCGCTGGGGCCCGCGGTCTGTACAGTG 761182

QY 181 AGCGTCGCGGCTGGAGGTCGCGAGTCGCACCGTCGACCTACGCGCGGATGTCGCCGA 240
DB 761183 AGCGTCGCGGCTGGAGGTCGCGAGTCGCACCGTCGACCTACGCGCGGATGTCGCCGA 761242

QY 241 TCGAAACCCCTGAGGGGCCCAACATCGTCTGATCGGCTCGCTGTGCTGATCGCGCGG 300
DB 761243 TCGAAACCCCTGAGGGGCCCAACATCGTCTGATCGGCTCGCTGTGCTGATCGCGCGG 761302

QY 301 TCAACCCGTTCCGGTTTCATCGAAACCGCTACCGCAAGGTGTCGACGCGGTGTTAGCG 360
DB 761303 TCAACCCGTTCCGGTTTCATCGAAACCGCTACCGCAAGGTGTCGACGCGGTGTTAGCG 761362

QY 361 ACAGATCGTGATACCTGACCGCGCAGAGAGGACCGCCACGTCGTGGTGACAGGCCAATT 420
DB 761363 ACAGATCGTGATACCTGACCGCGCAGAGAGGACCGCCACGTCGTGGTGACAGGCCAATT 761422

QY 421 CGCGGATCGATCGGAGCGGTGCTTCTGAGCGCGCGGTGCTGTCGCGCGGCAAGCGG 480
DB 761423 CGCGGATCGATCGGAGCGGTGCTTCTGAGCGCGCGGTGCTGTCGCGCGGCAAGCGG 761482

QY 481 GCGAGTGGAGTACGTGCTCTGAGTGAGTGACTACATGACGCTCGCGCCCGCCACA 540
DB 761483 GCGAGTGGAGTACGTGCTCTGAGTGAGTGACTACATGACGCTCGCGCCCGCCACA 761542

QY 541 TGTGTGCGTGGCCACCGGATGATTCCCTTCTTGAGGACGACGACGCGCAACCGTGCCC 600
DB 761543 TGTGTGCGTGGCCACCGGATGATTCCCTTCTTGAGGACGACGACGCGCAACCGTGCCC 761602

QY 601 TCAATGGGGCAACATGACGCGCAGCGGTGCGCTGCTGCTGCTAGCGAGGCGCGCTGG 660
DB 761603 TCAATGGGGCAACATGACGCGCAGCGGTGCGCTGCTGCTGCTAGCGAGGCGCGCTGG 761662

QY 661 TGGGACCCGGGATGGAGCTGCGCGCGCGATGACCGCG 699
DB 761663 TGGGACCCGGGATGGAGCTGCGCGCGCGATGACCGCG 761701

RESULT 4
US-08-250-030-1
```

```
; Sequence 1, Application US/08250030
; Patent No. 5643723
; GENERAL INFORMATION:
; APPLICANT: Persing, David H.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in
; TITLE OF INVENTION: Clinical Specimens
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/250,030
; FILING DATE: 26-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Muetting, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 150.105US1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-250-030-1

Query Match      88.9%; Score 626.8; DB 1; Length 970;
Best Local Similarity 99.7%; Pred. No. 2.6e-135;
Matches 628; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACCGCAGACGTTGATCAACATCCGGCCGGTGGTCCGCG 60
DB 341 CCCAGAGCTGGAGGCGATCACACCGCAGACGTTGATCAACATCCGGCCGGTGGTCCGCG 400

QY 61 CGATCAAGGAGTTCTTCGGCACCAGCAGCTGAGCCAAATTCATGACCAACACCCGC 120
DB 401 CGATCAAGGAGTTCTTCGGCACCAGCAGCTGAGCCAAATTCATGACCAACACCCGC 460

QY 121 TGTCCGGGTTGACCCACAAGCGCGACTGTCGCGCTGGGGCCCGCGGTCTGTCACTG 180
DB 461 TGTCCGGGTTGACCCACAAGCGCGACTGTCGCGCTGGGGCCCGCGGTCTGTCACTG 520

QY 181 AGCGTCGCGGCTGGAGGTCGCGAGTCGACCCCTGCGACTACGCGCGGATGTCGCCGA 240
DB 521 AGCGTCGCGGCTGGAGGTCGCGAGTCGACCCCTGCGACTACGCGCGGATGTCGCCGA 580

QY 241 TCGAAACCCCTGAGGGGCCCAACATCGGCTCTGATCGGCTCGCTGTGTCGCGCGCGG 300
DB 581 TCGAAACCCCTGAGGGGCCCAACATCGGCTCTGATCGGCTCGCTGTGTCGCGCGCGG 640

QY 301 TCAACCCGTTCCGGTTTCATCGAAACCGCTACCGCAAGGTGTCGACGCGGTGTTAGCG 360
DB 641 TCAACCCGTTCCGGTTTCATCGAAACCGCTACCGCAAGGTGTCGACGCGGTGTTAGCG 700

QY 361 ACAGATCGTGATCCTGACCGCGCAGAGGAGCACCGCCACGTCGTGGCAGAGGCCAATT 420
DB 701 ACAGATCGTGATCCTGACCGCGCAGAGGAGCACCGCCACGTCGTGGCAGAGGCCAATT 760

QY 421 CGCGGATCGATCGGAGCGGTGCTGCTGCGAGCGCGGTGCTGCTCGCGCGCAAGCGG 480
```

Db	761	CGCCGATCATGTCGAGACGGTGGTTCGTCGAGCGCGTGGTCCGCCGCAAGCGG	820
Qy	481	GGAGGTGGAGTACGTGCGCCCTGCTGAGGTGGACTACATGGACGCTCGCCCCGCCAGA	540
Db	821	GGAGGTGGAGTACGTGCGCCCTGCTGAGGTGGACTACATGGACGCTCGCCCCGCCAGA	880
Qy	541	TGGTGTGGTGGCCACCGCGATGATTCCTTCCTGGAGCAGCAGCGCAACCGTGCC	600
Db	881	TGGTGTGGTGGCCACCGCGATGATTCCTTCCTGGAGCAGCAGCGCAACCGTGCC	940
Qy	601	TCATGGGGCAACATGCAGCGCCAGCGG	630
Db	941	TCATGGGGCAACATGCAGCGCCAGCGG	970

```

RESULT 5
PCT-US95-06790-1
; Sequence 1, Application PC/TUS9506790
; GENERAL INFORMATION:
; APPLICANT: Mayo Foundation for Medical Education and Research
; APPLICANT: and Hoffmann-La Roche Inc.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/06790
; FILING DATE: 26-MAY-1995

```

	Query Match	88.9%	Score 626.8	DB 5	Length 970	
	Best Local Similarity	99.7%	Prod. No. 2.6e-135			
	Matches 628	Conservative 0	Mismatches 2	Indels 0	Gaps 0	
Qy	1	CCGAGGACGTGGAGGCGATCACACCGCAGACGTTGATCAACATCGGCGCGTGGTCGCGG	60			
Db	341	CCGAGGACGTGGAGGCGGATCACACCGCAGCGTTGATCAACATCGGCGCGTGGTCGCGG	400			
Qy	61	CGATCAAGGAGTTCCTTCGGACACGACGACGTCGAGCCAAATTCATGGACACAGAACAAACCGCG	120			
Db	401	CGATCAAGGAGTTCCTTCGGACACGACGACGTCGAGCCAAATTCATGGACACAGAACAAACCGCG	460			
Qy	121	TGTCGGGGTTGACCCCAAGCGCCGATGTCTCGGCGCTGGGGCCCGCGGTTCTGTACAGTG	180			
Db	461	TGTCGGGGTTGACCCCAAGCGCCGATGTCTCGGCGCTGGGGCCCGCGGTTCTGTACAGTG	520			

Qy	181	AGCGTCGGGGCTGGAGGTCGGGACGTCGACCCGTCGCACCTACGGCCGGATGTGCCCGA	240
Db	521	AGCGTCGGGGCTGGAGGACGGACGTCGACCCGTCGCACCTACGGCCGGATGTGCCCGA	580
Qy	241	TCGAAACCCCTGAGGGGCCAAACATCGCTCTGATCGGCTCGCTGTCGCTGTACGGCGCGG	300
Db	581	TCGAAACCCCTGAGGGGCCAAACATCGCTCTGATCGGCTCGCTGTCGCTGTACGGCGCGG	640
Qy	301	TCAACCCGTTCCGGTTCATCGAAACGCCGTAACGCAAGGTGGTCGACGGCTGGTTAGCG	360
Db	641	TCAACCCGTTCCGGTTCATCGAAACGCCGTACCGCAAGTGGTCGACGGCTGGTTAGCG	700
Qy	361	ACGAGATCGTGTACCTGACCGCGACGAGGAGGACCGCCACGTGGTGCGACAGGCCAATT	420
Db	701	ACGAGATCGTGTACCTGACCGCGACGAGGAGGACCGCCACGTGGTGCGACAGGCCAATT	760
Qy	421	CGCCGATCGATGCGGACGGTCGCTTCGTTCAGACCGCGCGTCTCGTCCGCGCGAAGCGG	480
Db	761	CGCCGATCGATGCGGACGGTCGCTTCGTTCGAGCCCGCGGTGCTCGTCCGCGAAGCGG	820
Qy	481	GCAGGTGGAGTACGTGCCCTCGTCTGAGGTGGACTACATGGACGTCTCGGCCCGCCGAGA	540
Db	821	GCAGGTGGAGTACGTGCCCTCGTCTGAGGTGGACTACATGGACGTCTCGGCCCGCCGAGA	880
Qy	541	TGCTGTCTGGTGGCCACCGCATGATTCCTTCCTGGAGACGACGACGCCAACCGTGCCC	600
Db	881	TGCTGTCTGGTGGCCACCGCATGATTCCTTCCTGGAGACGACGACGCCAACCGTGCCC	940
Qy	601	TCATGGGGGCAAAATCAGCGCCAGGCGG	630
Db	941	TCATGGGGGCAAAATCAGCGCCAGGCGG	970

RESULT 6
US-08-757-653-135
Sequence 135, Application US/08757653
Patent No. 5843669
GENERAL INFORMATION:
APPLICANT: Kaiser, Michael W.
APPLICANT: Lyamichev, Victor I.
APPLICANT: Lyamichev, Natasha
TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
NUMBER OF SEQUENCES: 190
CORRESPONDENCE ADDRESS:
ADDRESSEE: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40, 027
REFERENCE/DOCKET NUMBER: FORS-02565
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 135:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear


```
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-135

Query Match      87.9%; Score 620; DB 2; Length 620;
Best Local Similarity 100.0%; Pred. No. 8.7e-134;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 36 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGTTCTTCGGCACCAAGCAGCTGAGC 95
DB 1 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGTTCTTCGGCACCAAGCAGCTGAGC 60

QY 96 CAATTATGACACAGAACACCGCTGTCGCGGTTCACCCACAGGCGCCGACTGTCGGCG 155
DB 61 CAATTATGACACAGAACACCGCTGTCGCGGTTCACCCACAGGCGCCGACTGTCGGCG 120

QY 156 CTGGGCGCCGCGGTCTGTCACTGAGCGTGC CGGCGTGGAGTTCGCGACGTGCAACCCG 215
DB 121 CTGGGCGCCGCGGTCTGTCACTGAGCGTGC CGGCGTGGAGTTCGCGACGTGCAACCCG 180

QY 216 TCGCACTACGCGCGGATGTCGCGATCGAACACCCCTGAGGGGCGCCACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTCGCGATCGAACACCCCTGAGGGGCGCCACATCGGTCTGATC 240

QY 276 GGTCTCGTCTGCTGACGCGCGGCTCAACCGTTCGGGTTTCATCGAAACGCGGTACCCG 335
DB 241 GGTCTCGTCTGCTGACGCGCGGCTCAACCGTTCGGGTTTCATCGAAACGCGGTACCCG 300

QY 336 AAGGTGGTGCACGCGGTGTTAGCGACGAGATCGTGTACCTGACCCGCGACGAGGAGGAC 395
DB 301 AAGGTGGTGCACGCGGTGTTAGCGACGAGATCGTGTACCTGACCCGCGACGAGGAGGAC 360

QY 396 CGCACGTGTGTCACAGCCGCAATTCGCGATCGATCGGACGCGTTCGTCGAGCGCG 455
DB 361 CGCACGTGTGTCACAGCCGCAATTCGCGATCGATCGGACGCGTTCGTCGAGCGCG 420

QY 456 CGGCTGCTGCTCGCGCGGAGCGGCGAGTGGAGTACGTGCGCTCTGTCGAGTGGAC 515
DB 421 CGGCTGCTGCTCGCGCGGAGCGGCGAGTGGAGTACGTGCGCTCTGTCGAGTGGAC 480

QY 516 TACATGAGCGTCTCGCCCGCGCAGATGGTGTGGTGGCCACCGCGATGATTCCTTCTTG 575
DB 481 TACATGAGCGTCTCGCCCGCGCAGATGGTGTGGTGGCCACCGCGATGATTCCTTCTTG 540

QY 576 GAGCAGCAGCGCCACCGTGCCTCATCGGGGGCAAAACATGACGCGCGCGGTGCGCG 635
DB 541 GAGCAGCAGCGCCACCGTGCCTCATCGGGGGCAAAACATGACGCGCGCGGTGCGCG 600

QY 636 CTGGTCCGTAGCGAGGCCCC 655
DB 601 CTGGTCCGTAGCGAGGCCCC 620
```

RESULT 7

```
US-08-757-653-138/c
; Sequence 138, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Nataasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
```

```
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138
```

```
Query Match      87.9%; Score 620; DB 2; Length 620;
Best Local Similarity 100.0%; Pred. No. 8.7e-134;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 36 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGTTCTTCGGCACCAAGCAGCTGAGC 95
DB 620 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGTTCTTCGGCACCAAGCAGCTGAGC 561

QY 96 CAATTATGACACAGAACACCGCTGTCGCGGTTCACCCACAGGCGCCGACTGTCGGCG 155
DB 560 CAATTATGACACAGAACACCGCTGTCGCGGTTCACCCACAGGCGCCGACTGTCGGCG 501

QY 156 CTGGGCGCCGCGGTCTGTCACTGAGCGTGC CGGCGTGGAGTTCGCGACGTGCAACCCG 215
DB 500 CTGGGCGCCGCGGTCTGTCACTGAGCGTGC CGGCGTGGAGTTCGCGACGTGCAACCCG 441

QY 216 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCGCCAAACATCGGTCTGATC 275
DB 440 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCGCCAAACATCGGTCTGATC 381

QY 276 GGTCTGCTGCTCGCGCGGTCACCGGTTCGCGGTTCATCGAAACGCGGTACCCG 335
DB 380 GGTCTGCTGCTCGCGCGGTCACCGGTTCGCGGTTCATCGAAACGCGGTACCCG 321

QY 336 AAGGTGGTGCACGCGGTGTTAGCGACGAGATCGTGTACCTGACCCGCGACGAGGAGGAC 395
DB 320 AAGGTGGTGCACGCGGTGTTAGCGACGAGATCGTGTACCTGACCCGCGACGAGGAGGAC 261

QY 396 CGCCACGTCGTGTCGACAGCCCAATTTCGCCGATCGATGCGGACGCGTTCGTCGAGCGCG 455
DB 260 CGCCACGTCGTGTCGACAGCCCAATTTCGCCGATCGATGCGGACGCGTTCGTCGAGCGCG 201

QY 456 CGCGTGTGTCGCGCGGCAAGCGCGGCTGGAGTACGTGCCCTCTGTCGAGTGGAC 515
DB 200 CGCGTGTGTCGCGCGGCAAGCGCGGCTGGAGTACGTGCCCTCTGTCGAGTGGAC 141

QY 516 TACATGAGCGTCTCGCCCGCGCAGATGGTGTGGTGGCCACCGCGATGATTCCTTCTTG 575
DB 140 TACATGAGCGTCTCGCCCGCGCAGATGGTGTGGTGGCCACCGCGATGATTCCTTCTTG 81

QY 576 GAGCAGCAGCAGCCCAACCGTGCCTCATCGGGGGCAAAACATGACGCGCGAGCGGTGCGCG 635
DB 80 GAGCAGCAGCAGCCCAACCGTGCCTCATCGGGGGCAAAACATGACGCGCGAGCGGTGCGCG 21

QY 636 CTGGTCCGTAGCGAGGCCCC 655
DB 20 CTGGTCCGTAGCGAGGCCCC 1
```

RESULT 8

US-08-520-946-135

```

; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-520-946-135

```

```

Query Match      87.9%; Score 620; DB 3; Length 620;
Best Local Similarity 100.0%; Pred. No. 8.7e-134;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 36 ATCAACATCCGGCGGTGTCGCCGATCAAGGAGTCTTCGGCACCAGCCAGCTGAGC 95
DB 1 ATCAACATCCGGCGGTGTCGCCGATCAAGGAGTCTTCGGCACCAGCCAGCTGAGC 60

QY 96 CAATTTCATGGACCAAGAACCAACCCCTGAGGGGCTGAGGGGCCCAACATCGGTCGTATC 155
DB 61 CAATTTCATGGACCAAGAACCAACCCCTGAGGGGCTGAGGGGCCCAACATCGGTCGTATC 120

QY 156 CTGGGGCCCGGGTCTGTGTCAGTGCAGCGTGCCTGGGCTGAGGTCGGGACGTGACCCG 215
DB 121 CTGGGGCCCGGGTCTGTGTCAGTGCAGCGTGCCTGGGCTGAGGTCGGGACGTGACCCG 180

QY 216 TCGCACTAGCGCGGATGTCGGGATCGAAACCCCTGAGGGGCCCAACATCGGTCGTATC 275
DB 181 TCGCACTAGCGCGGATGTCGGGATCGAAACCCCTGAGGGGCCCAACATCGGTCGTATC 240

QY 276 GCGTCGCTGTCGGGTACCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCGC 335
DB 241 GCGTCGCTGTCGGGTACCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCGC 300

QY 336 AAGGTGGTCGACGGCGTGTGTCAGGACGAGATCGTGTACTTCACTGACCCGCGACGAGAGGAC 395
DB 301 AAGGTGGTCGACGGCGTGTGTCAGGACGAGATCGTGTACTTCACTGACCCGCGACGAGAGGAC 360

QY 396 CGCCACGTGGTCACAGCCCAATTCGCGGATCGATGCGGAGGTCGGTTCGTCGAGCGC 455
DB 361 CGCCACGTGGTCACAGCCCAATTCGCGGATCGATGCGGAGGTCGGTTCGTCGAGCGC 420

```

```

QY 456 CGCGTGTGGTCCGCCCAAGCGCGGCGAGGTGAGTACGTGCCCTCGTCTGAGTGGAC 515
DB 421 CGCGTGTGGTCCGCCCAAGCGCGGCGAGGTGAGTACGTGCCCTCGTCTGAGTGGAC 480

QY 516 TACATGACGTCTCGCCCCCGCCAGATGTCGGTGGCCACCGGATGATTCCTTCCTG 575
DB 481 TACATGACGTCTCGCCCCCGCCAGATGTCGGTGGCCACCGGATGATTCCTTCCTG 540

QY 576 GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCAACATGACGCGCAGCGGTGCCG 635
DB 541 GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCAACATGACGCGCAGCGGTGCCG 600

QY 636 CTGGTCCGTAGCGAGGCCCC 655
DB 601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 9
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-520-946-138

```

```

Query Match      87.9%; Score 620; DB 3; Length 620;
Best Local Similarity 100.0%; Pred. No. 8.7e-134;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 36 ATCAACATCCGGCGGTGTCGCCGATCAAGGAGTCTTCGGCACCAGCCAGCTGAGC 95
DB 620 ATCAACATCCGGCGGTGTCGCCGATCAAGGAGTCTTCGGCACCAGCCAGCTGAGC 561

QY 96 CAATTTCATGGACCAAGAACCAACCCCTGAGGGGTTGACCCCAAGCGCGGACTGTCGGCG 155
DB 560 CAATTTCATGGACCAAGAACCAACCCCTGAGGGGTTGACCCCAAGCGCGGACTGTCGGCG 501

QY 156 CTGGGGCCCGGGTCTGTGTCAGTGCAGCGTGCCTGGGCTGAGGTCGCGACGTCGACCCG 215

```

```
Db 500 CTGGGGCCGGCGTCTGTCACTGAGCTGCCGGGTGAGGTCCGGACGTGACCCG 441
Qy 216 TCGCACTACGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCAAACATCGGTCTGATC 275
Db 440 TCGCACTACGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCAAACATCGGTCTGATC 381
Qy 276 GGCTCGCTCGGTGTACGCGCGGGTCAACCCGTTCCGGTTTCATCGAAACCGCGTACCCG 335
Db 380 GGCTCGCTCGGTGTACGCGCGGGTCAACCCGTTCCGGTTTCATCGAAACCGCGTACCCG 321
Qy 336 AAGTGTGTACGCGCGGTGTACGCGAGATCGTGTACCTGACCGCCGACGAGGAGGAC 395
Db 320 AAGTGTGTACGCGCGGTGTACGCGAGATCGTGTACCTGACCGCCGACGAGGAGGAC 261
Qy 396 CGCCACGTGTGTGACAGCGCAATTCGCCGATCGATCGCGACGGTTCGTTTCGTCGAGCCG 455
Db 260 CGCCACGTGTGTGACAGCGCAATTCGCCGATCGATCGCGACGGTTCGTTTCGTCGAGCCG 201
Qy 456 CGCGTCTGTGTCCGCGCAAGGCGGCGAGGTGAGTACGTGCCCTCGTCTGAGGTGGAC 515
Db 200 CGCGTCTGTGTCCGCGCAAGGCGGCGAGGTGAGTACGTGCCCTCGTCTGAGGTGGAC 141
Qy 516 TACATGACGTCTCGCCCGCCAGATGTGTGGTGGCCACCGCGATGATTCCTTTCCTG 575
Db 140 TACATGACGTCTCGCCCGCCAGATGTGTGGTGGCCACCGCGATGATTCCTTTCCTG 81
Qy 576 GAGCACGACGCCAACCGTGCCTCATGGGGCAAAACATGACGCGCCAGCGGTGCCG 635
Db 80 GAGCACGACGCCAACCGTGCCTCATGGGGCAAAACATGACGCGCCAGCGGTGCCG 21
Qy 636 CTGGTCCGTAGCGAGGCC 655
Db 20 CTGGTCCGTAGCGAGGCC 1
```

RESULT 10

```
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
```

```
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match      87.9%; Score 620; DB 4; Length 620;
Best Local Similarity 100.0%; Pred. No. 8.7e-134;
Matches 620; Conservative 0; Mismatch 0; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGCGCGGTGTCCCGATCAAGGAGTTCTTCGGACACAGCCAGCTGAGC 95
Db 1 ATCAACATCCGCGCGGTGTCCCGATCAAGGAGTTCTTCGGACACAGCCAGCTGAGC 60
Qy 96 CAATTATGAGACAGAAACCCCGTGTCTGGGTTTGACCCACAAGCGCCAGCTGTGGCG 155
Db 61 CAATTATGAGACAGAAACCCCGTGTCTGGGTTTGACCCACAAGCGCCAGCTGTGGCG 120
Qy 156 CTGGGGCCCGCGGTGTGTACGTGAGCGTGCAGGCTGGAGGTCCGCGACGTGACCCG 215
Db 121 CTGGGGCCCGCGGTGTGTACGTGAGCGTGCAGGCTGGAGGTCCGCGACGTGACCCG 180
Qy 216 TCGCACTACGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
Qy 276 GGCTCGCTGTCTGGTGTACGCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCGC 335
Db 241 GGCTCGCTGTCTGGTGTACGCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCGC 300
Qy 336 AAGGTGTGTACGCGCGGTGTAGCGACGAGATCGTGTACCTGACCGCCGACGAGGAGGAC 395
Db 301 AAGGTGTGTACGCGCGGTGTAGCGACGAGATCGTGTACCTGACCGCCGACGAGGAGGAC 360
Qy 396 CGCCACGTGTGTGACAGCGCAATTCGCCGATCGATGGGACGGTCCGTTTCGTCGAGCGC 455
Db 361 CGCCACGTGTGTGACAGCGCAATTCGCCGATCGATGGGACGGTCCGTTTCGTCGAGCGC 420
Qy 456 CGCGTGTGTCTCGCGCGCAAGCGCGGCGAGGTGAGTACGTGCCCTCGTCTGAGGTGGAC 515
Db 421 CGCGTGTGTCTCGCGCGCAAGCGCGGCGAGGTGAGTACGTGCCCTCGTCTGAGGTGGAC 480
Qy 516 TACATGAGCTGTCCGCGCGCGCAGATGTGTGGTGGCCACCGCGATGATTCCTTTCCTG 575
Db 481 TACATGAGCTGTCCGCGCGCGCAGATGTGTGGTGGCCACCGCGATGATTCCTTTCCTG 540
Qy 576 GAGCACGACGCCAACCGTGCCTCATGGGGCAAAACATGACGCGCCAGCGGTGCCG 635
Db 541 GAGCACGACGCCAACCGTGCCTCATGGGGCAAAACATGACGCGCCAGCGGTGCCG 600
Qy 636 CTGGTCCGTAGCGAGGCC 655
Db 601 CTGGTCCGTAGCGAGGCC 620
```

RESULT 11

```
US-09-655-378A-138/c
; Sequence 138, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; LYAMICHEV, VICTOR I.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
```

```
/
/
/      ZIP: 94104
/      COMPUTER READABLE FORM:
/      MEDIUM TYPE: Floppy disk
/      COMPUTER: IBM PC compatible
/      OPERATING SYSTEM: PC-DOS/MS-DOS
/      SOFTWARE: Patent In Release #1.0, Version #1.30
/      CURRENT APPLICATION DATA:
/      APPLICATION NUMBER: US/09/655,378A
/      FILING DATE: 05-Sep-2000
/      CLASSIFICATION: <Unknown>
/      ATTORNEY/AGENT INFORMATION:
/      NAME: CARROLL, PETER G.
/      REGISTRATION NUMBER: 32,837
/      REFERENCE/DOCKET NUMBER: FORS-01756
/      TELECOMMUNICATION INFORMATION:
/      TELEPHONE: (415) 705-8410
/      TELEFAX: (415) 397-8338
/      INFORMATION FOR SEQ ID NO: 138:
/      SEQUENCE CHARACTERISTICS:
/      LENGTH: 620 base pairs
/      TYPE: nucleic acid
/      STRANDEDNESS: double
/      TOPOLOGY: linear
/      MOLECULE TYPE: DNA (genomic)
/      SEQUENCE DESCRIPTION: SEQ ID NO: 138:
US-09-655-378A-138

      Query Match      87.9%; Score 620; DB 4; Length 620;
      Best Local Similarity 100.0%; Pred. No. 8.7e-134;
      Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      36 ATCAACATCCGGCGGTGTCGCCGATCAAGAGGATCTTCGGCACCGACGCTGAGC 95
Db      |||||||
Db      620 ATCAACATCCGGCGGTGTCGCCGATCAAGAGGATCTTCGGCACCGACGCTGAGC 561

QY      96 CAATTATCGACAGAACCAACCGCTGTGCGGGTTGACCCACAAGCGCGACTGTGCGCG 155
Db      |||||||
Db      560 CAATTATCGACAGAACCAACCGCTGTGCGGGTTGACCCACAAGCGCGACTGTGCGCG 501

QY      156 CTGGGGCCGGCGGTCTGTACGTGAGCGTGC CGGGCTGGAGTCCGGACGCTGCACCG 215
Db      |||||||
Db      500 CTGGGGCCGGCGGTCTGTACGTGAGCGTGC CGGGCTGGAGTCCGGACGCTGCACCG 441

QY      216 TCGCACTACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
Db      |||||||
Db      440 TCGCACTACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

QY      276 GGCTCGCTGTGCGGTGACCGCGGGTCAACCCGTTGCGGTTTCATCGAAACGCCGTACCGC 335
Db      |||||||
Db      380 GGCTCGCTGTGCGGTGACCGCGGGTCAACCCGTTGCGGTTTCATCGAAACGCCGTACCGC 321

QY      336 AAGGTGGTCGACGGGTGTTAGCGACGAGATCGTGATCTACCGCCGACGAGGAGGAC 395
Db      |||||||
Db      320 AAGGTGGTCGACGGGTGTTAGCGACGAGATCGTGATCTACCGCCGACGAGGAGGAC 261

QY      396 CGCCACGTGGTGACAGAGCCAAATTCGCGATCGATGCGAGCGGTGCTTCGTCGAGCGG 455
Db      |||||||
Db      260 CGCCACGTGGTGACAGAGCCAAATTCGCGATCGATGCGAGCGGTGCTTCGTCGAGCGG 201

QY      456 CGCGTGTGCTGGTCCGCGCAAGCGGGCGAGGTGGAGTACGTGCCCTCGCTCGAGTGGAC 515
Db      |||||||
Db      200 CGCGTGTGCTGGTCCGCGCAAGCGGGCGAGGTGGAGTACGTGCCCTCGCTCGAGTGGAC 141

QY      516 TACATGGAGCTCTCGCCCGCCAGATGGTGGTGGCCACCGCATGATTCCTTCCTG 575
Db      |||||||
Db      140 TACATGGAGCTCTCGCCCGCCAGATGGTGGTGGCCACCGCATGATTCCTTCCTG 81

QY      576 GAGCAGCAGACGCCCAACCGTGCCTCATGCGGGGCAACATGACGCGCCAGCGGTGCGG 635
Db      |||||||
Db      80 GAGCAGCAGACGCCCAACCGTGCCTCATGCGGGGCAACATGACGCGCCAGCGGTGCGG 21

QY      636 CTGGTCCGTAGGAGGCCCC 655
      |||||||
```

```
Db      20 CTGGTCCGTAGGAGGCCCC 1

RESULT 12
US-08-757-653-136
; Sequence 136, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Natasha
; APPLICANT: Lyamichev, Victor I.
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 136:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-136

      Query Match      87.7%; Score 618.4; DB 2; Length 620;
      Best Local Similarity 99.8%; Pred. No. 2e-133;
      Matches 619; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      36 ATCAACATCCGGCGGTGTCGCCGATCAAGAGGATCTTCGGCACCGACGCTGAGC 95
Db      |||||||
Db      1 ATCAACATCCGGCGGTGTCGCCGATCAAGAGGATCTTCGGCACCGACGCTGAGC 60

QY      96 CAATTATCGACAGAACCAACCGCTGTGCGGGTTGACCCACAAGCGCGACTGTGCGCG 155
Db      |||||||
Db      61 CAATTATCGACAGAACCAACCGCTGTGCGGGTTGACCCACAAGCGCGACTGTGCGCG 120

QY      156 CTGGGGCCGGCGGTCTGTACGTGAGCGTGC CGGGCTGGAGTCCGCGACGTCACCG 215
Db      |||||||
Db      121 CTGGGGCCGGCGGTCTGTACGTGAGCGTGC CGGGCTGGAGTCCGCGACGTCACCG 180

QY      216 TCGCACTACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
Db      |||||||
Db      181 TCGCACTACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

QY      276 GGCTCGCTGTGCGGTGACCGCGGGTCAACCCGTTGCGGTTTCATCGAAACGCCGTACCGC 335
Db      |||||||
Db      241 GGCTCGCTGTGCGGTGACCGCGGGTCAACCCGTTGCGGTTTCATCGAAACGCCGTACCGC 300

QY      336 AAGGTGGTCGACGGGTGTTAGCGACGAGATCGTGATCTACCGCCGACGAGGAGGAC 395
Db      |||||||
Db      301 AAGGTGGTCGACGGGTGTTAGCGACGAGATCGTGATCTACCGCCGACGAGGAGGAC 360
```

QY 396 CGCCAGCTGTCGACAGGCGCAATTCGCCGATCGATCGGACGGTTCGTCGAGCCG 455
Db 361 CGCCAGCTGTCGACAGGCGCAATTCGCCGATCGATCGGACGGTTCGTCGAGCCG 420
QY 456 CGCGTCTGTCGCGCGCGCAAGCGCGGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC 515
Db 421 CGCGTCTGTCGCGCGCGCAAGCGCGGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC 480
QY 516 TACATGAGAGTCTCGCGCGCGCGCAAGGTGGAGTGGTGGCCACCGCGATGATTCCTTCCTG 575
Db 481 TACATGAGAGTCTCGCGCGCGCGCAAGGTGGAGTGGTGGCCACCGCGATGATTCCTTCCTG 540
QY 576 GAGCAGCAGCAGCG 635
Db 541 GAGCAGCAGCAGCG 600
QY 636 CTGGTCCGTAGCGAGGCCCC 655
Db 601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 13

US-08-757-653-137
; Sequence 137, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104

COMPUTER READABLE FORM:

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 137:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)

US-08-757-653-137

Query Match 87.7%; Score 618.4; DB 2; Length 620;
Best Local Similarity 99.8%; Pred. No. 2e-133; 1; Indels 0; Gaps 0;
Matches 619; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 36 ATCAACATCCGCGCGGTGGTGGCGGATCAAGAGTCTTCGGCACCGCAGCTGAGC 95
Db 1 ATCAACATCCGCGCGGTGGTGGCGGATCAAGAGTCTTCGGCACCGCAGCTGAGC 60

QY 96 CAATTATGTCGACAGCAACCCGCTGTCTGGGGTTGACCCCAAGCGCCGACTGTCTGGCG 155
Db 61 CAATTATGTCGACAGCAACCCGCTGTCTGGGGTTGACCCCAAGCGCCGACTGTCTGGCG 120
QY 156 CTGGGGCCCCGGGCTGTGTACGTGAGCGTGCCTGGGCTGGAGGTCCGCGACGTCGACCCG 215
Db 121 CTGGGGCCCCGGGCTGTGTACGTGAGCGTGCCTGGGCTGGAGGTCCGCGACGTCGACCCG 180
QY 216 TCGCACTACGCGCGGATGTCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGCTGTGTCGCGCGGCTCAACCCGTTCCGGGTTTCATCGAAACGCCGTACCCG 335
Db 241 GGCTCGCTGTGTCGCGCGGCTCAACCCGTTCCGGGTTTCATCGAAACGCCGTACCCG 300
QY 336 AAGGTGGTTCGACGCGGCTGTAGCGACGAGATCGTGATCCTGACCGCCGACGAGGAGGAC 395
Db 301 AAGGTGGTTCGACGCGGCTGTAGCGACGAGATCGTGATCCTGACCGCCGACGAGGAGGAC 360
QY 396 CGCCACGTGTGGCACAGGCCAATTCGCCGATCGATCGGACGGTTCGTCGAGCGCG 455
Db 361 CGCCACGTGTGGCACAGGCCAATTCGCCGATCGATCGGACGGTTCGTCGAGCGCG 420
QY 456 CGCGTGTGTCGCGCGCAAGCGCGGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC 515
Db 421 CGCGTGTGTCGCGCGCAAGCGCGGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC 480
QY 516 TACATGAGAGTCTCG 575
Db 481 TACATGAGAGTCTCG 540
QY 576 GAGCAGCAGCAGCG 635
Db 541 GAGCAGCAGCAGCG 600
QY 636 CTGGTCCGTAGCGAGGCCCC 655
Db 601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 14

US-08-757-653-139/c
; Sequence 139, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:

[illegible]

```

; RESULT 15
; US-08-757-653-140/c
; ; Sequence 140, Application US/08757653
; ; Patent No. 5843669
; ; GENERAL INFORMATION:
; ; APPLICANT: Kaiser, Michael W.
; ; APPLICANT: Lyamichev, Victor I.
; ; APPLICANT: Lyamichev, Natasha
; ; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; ; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; ; NUMBER OF SEQUENCES: 190
; ; CORRESPONDENCE ADDRESS:
; ; ADDRESSEE: Medlen & Carroll, LLP
;

```

```

; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 140:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-140

```

Query Match	87.7%	Score 618.4	DB 2	Length 620
Best Local Similarity	99.8%	Pred. No. 28-133		
Matches 619	Conservative 0	Mismatches 1	Indels 0	Gaps 0
Qy	36	ATCAACATCCGGCCGGTGGTCGCGCGCATCAAGAGATTCTTCGGCACCCAGCCAGCTGAGC	95	
Db	620	ATCAACATCCGGCCGGTGGTCGCGCGATCAAGAGATTCTTCGGCACCCAGCCAGCTGAGC	561	
Qy	96	CAATTTCATGACCAGAAACAACCCGCTGTCCGGGTTCACCCAAGCGCCACTGTCCGGC	155	
Db	560	CAATTTCATGACCAGAAACAACCCGCTGTCCGGGTTCACCCAAGCGCCACTGTTCCGGC	501	
Qy	156	CTGGGGCCCGGCTGTGTACGTGAGCGTCGCGGCTGGAGTCCGGAGCTGCACCCG	215	
Db	500	CTGGGGCCCGGCGTCTGTACGTGAGCGTCGCGGCTGGAGTCCGGAGCTGCACCCG	441	
Qy	216	TCCGACTACCGCCGGGATGTCCCGATCGAAACCCCTGAGGGGCCAACATCGGTCCTGATC	275	
Db	440	TCCGACTACCGCCGGGATGTCCCGATCGAAACCCCTGAGGGGCCAACATCGGTCCTGATC	381	
Qy	276	GGTCGCTGTGCTGTACCGCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCCCGTACCGC	335	
Db	380	GGTCGCTGTGCTGTACCGCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCCCGTACCGC	321	
Qy	336	AAGTGGTCACCGCGTGGTTACGACGAGATCGTGTACCTGACCGCCGACGAGGAGAC	395	
Db	320	AAGTGGTCACCGCGTGGTTACGACGAGATCGTGTACCTGACCGCCGACGAGGAGAC	261	
Qy	396	CGCCACGTGTGTGCACAGGCCAATTCCCGCATCGATCGGACGCGTCCGTTCTGTCGAGCCG	455	
Db	260	CGCCACGTGTGTGCACAGGCCAATTCCCGCATCGATCGGACGCGTCCGTTCTGTCGAGCCG	201	
Qy	456	CGCGTGTGTGTCCGCGCAAGGGCGGGGAGGTGGAGTACGTGCCCTCGTCTGAGGTGAC	515	
Db	200	CGCGTGTGTGTCCGCGCAAGGGCGGGGAGGTGGAGTACGTGCCCTCGTCTGAGGTGAC	141	
Qy	516	TACATGACGTCTCGCCCGCCAGATGGTGTCCGTGGCCACCGCGATGATTCCCTTCCTG	575	
Db	140	TACATGACGTCTCGCCCGCCAGATGGTGTCCGTGGCCACCGCGATGATTCCCTTCCTG	81	
Qy	576	GAGCAGCAGCAGCCAAACCGTGCCTTCATGGGGGCCAAACATGACGGCCAGGCGGTCCG	635	
Db	80	GAGCAGCAGCAGCCAAACCGTGCCTTCATGGGGGCCAAACATGACGGCCAGGCGGTCCG	21	

Qy 636 CTGGTCCGTAGCGAGGCCCC 655
| | | | | | | | | | | | | | | | | |
Db 20 CTGGTCCGTAGCGAGGCCCC 1

Search completed: August 24, 2005, 22:23:50
Job time : 115.459 secs

This Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 91.866 Seconds
(without alignments)
11150.034 Million cell updates/sec

Title: US-09-285-306-2
Perfect score: 626
Sequence: 1 tccgtcccgctggtggcggc.....aggctcccgctggtgggtacc 626

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405569

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents NA:*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PTCUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	480.4	76.7	706	US-08-797-812-24	Sequence 24, Appl
2	480.4	76.7	4403765	3 US-09-103-840A-2	Sequence 2, Appli
3	480.4	76.7	4411529	3 US-09-103-840A-1	Sequence 1, Appli
4	470.6	75.2	620	2 US-08-757-653-135	Sequence 135, App
5	470.6	75.2	620	2 US-08-757-653-138	Sequence 138, App
6	470.6	75.2	620	3 US-08-520-946-135	Sequence 135, App
7	470.6	75.2	620	3 US-08-520-946-138	Sequence 138, App
8	470.6	75.2	620	4 US-09-655-378A-135	Sequence 135, App
9	470.6	75.2	620	4 US-09-655-378A-138	Sequence 138, App
10	469	74.9	620	2 US-08-757-653-136	Sequence 136, App
11	469	74.9	620	2 US-08-757-653-137	Sequence 137, App
12	469	74.9	620	2 US-08-757-653-139	Sequence 139, App
13	469	74.9	620	2 US-08-757-653-140	Sequence 140, App
14	469	74.9	620	3 US-08-520-946-136	Sequence 136, App
15	469	74.9	620	3 US-08-520-946-137	Sequence 137, App
16	469	74.9	620	3 US-08-520-946-139	Sequence 139, App
17	469	74.9	620	3 US-08-520-946-140	Sequence 140, App
18	469	74.9	620	4 US-09-655-378A-136	Sequence 136, App
19	469	74.9	620	4 US-09-655-378A-137	Sequence 137, App
20	469	74.9	620	4 US-09-655-378A-139	Sequence 139, App
21	469	74.9	620	4 US-09-655-378A-140	Sequence 140, App
22	456.4	72.9	3447	2 US-08-313-185-57	Sequence 57, Appl
23	456.4	72.9	3447	3 US-09-082-614A-57	Sequence 57, Appli
24	447.2	71.4	970	1 US-08-250-030-1	Sequence 1, Appli
25	447.2	71.4	970	5 PCT-US95-06790-1	Sequence 1, Appli
26	373.2	59.6	5099	4 US-09-887-052-1	Sequence 1, Appli
27	371.6	59.4	5099	4 US-09-887-052-3	Sequence 3, Appli

28	371.6	59.4	5099	4	US-09-887-052-5	Sequence 5, Appli
29	363	58.0	706	3	US-08-797-812-25	Sequence 25, Appli
30	349.6	55.8	4227	4	US-09-902-540-8919	Sequence 8919, Ap
31	349.6	55.8	9367	4	US-09-902-540-951	Sequence 951, App
32	325	51.9	4074	4	US-09-252-991A-4737	Sequence 4737, Ap
33	325	51.9	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
34	322.4	51.5	4083	4	US-09-489-039A-22	Sequence 22, Appli
35	322.4	51.5	4206	4	US-09-489-039A-30	Sequence 30, Appli
36	262.2	41.9	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
37	252.8	40.4	11935	4	US-09-634-238-401	Sequence 401, App
38	247.2	39.5	2964	4	US-09-540-236-1097	Sequence 1097, Ap
39	247.2	39.5	31063	4	US-09-596-002-20	Sequence 20, Appli
40	245.6	39.2	4143	4	US-09-328-352-4006	Sequence 4006, Ap
41	239.4	38.2	3612	4	US-09-583-110-973	Sequence 973, App
42	239.4	38.2	3651	4	US-09-107-433-1652	Sequence 1652, Ap
43	238.2	38.1	1830121	4	US-09-557-884-1	Sequence 1, Appli
44	238.2	38.1	1830121	4	US-09-643-990A-1	Sequence 1, Appli
45	237.8	38.0	14672	3	US-08-961-527-111	Sequence 111, App

ALIGNMENTS

RESULT 1
US-08-797-812-24
; Sequence 24, Application US/08797812
; Patent No. 6228575
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas A.
; APPLICANT: Mack, David
; APPLICANT: Chee, Mark S.
; APPLICANT: Berno, Anthony J.
; APPLICANT: Stryer, Lubert
; APPLICANT: Ghandour, Ghassan
; APPLICANT: Wang, Ching
; TITLE OF INVENTION: Chip-Based Species Identification and
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111

COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/797,812
; FILING DATE: 07-FEB-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/017,765
; FILING DATE: 15-MAY-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/629,031
; FILING DATE: 08-APR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/012,631
; FILING DATE: 01-MAR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/011,339
; FILING DATE: 08-FEB-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Fitts, Renee A.
; REGISTRATION NUMBER: 35,136
; REFERENCE/DOCKET NUMBER: 16528X-018550
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-326-2400
; TELEFAX: 415-326-2422

```

; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 706 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: single
;   TOPOLOGY: linear
;   MOLECULE TYPE: cDNA
US-08-797-812-24

```

```

Query Match      76.7%; Score 480.4; DB 3; Length 706;
Best Local Similarity 85.5%; Pred. No. 5.2e-99;
Matches 535; Conservative 0; Mismatches 91; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCGTGGCGCGATCAAGGAGTCTTCGGAACCAAGCCAGCTGTCGAGATTCA 60
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 44 TCCGCGCGTGGTCCCGCGATCAAGGAGTCTTCGGAACCAAGCCAGCTGTCGAGCAATTCA 103
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 61 TGGACCAAGAACCAACCGCTGTCGGGCTTGACCCCAAGCGTCTGTCGCGCTGGGCC 120
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 104 TGGACCAAGAACCAACCGCTGTCGGGCTTGACCCCAAGCGCTGTCGCGCTGGGCC 163
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 121 CCGGTGCTGACCGCTGACCGCGCGCTGCGAGGTCGCGAGTCCGACCCCTCGCACT 180
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 164 CCGCGGTCTGTACGTGAGCGTCCCGGCTGGAGTCCGACGTGACCCCTCGCACT 223
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 181 ACGGCCGCGATGTGCCCGATCGAGACCCCGGAAGGCCGAAACATCGGCCTGATCGGCTCGC 240
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 224 ACGGCCGCGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGC 283
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 241 TGTGCGTGTACCGCGGTGCAACCGCTGCGTTCATCGAGACGCTTACCGGAAGGTCT 300
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 284 TGTGCGTGTACCGCGGTGCAACCGCTTCCGGTTTCATCGAAACCGCTTACCGGAAGGTG 343
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 301 CGGACGAGTGTACCGACGACATCCACTACCTGACGCGCGAGCAAGAGACCGCCACG 360
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 344 TCGACGCGGTGTAGCGACGAGATCGTGTACCTGACCGCGACGAGGAGACCGCCACG 403
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 361 TGGTGGCGAGCCAACTCGCCGCTGGAGCGCAACCGCGCTTCAACCGAGGAGAGATCC 420
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 404 TGGTGGCACAGGCCAAATTCGCGATCGATCGGAGCGTTCGTTCGACGCGCGCGTGC 463
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 421 TGGTTCGCGCAAGGGCGGAGGTGAGTTCGTGTCGGGACCGAGTCTGACATACATGG 480
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 464 TGGTTCGCGCAAGGGCGGAGGTGAGTTCGTGTCGGGACCGAGTCTGCTGAGGTGACATGG 523
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 481 ATGTCCTCGCGCGCAGATGTGTCGTCGCGACCGCCATGATCCGTTCTCTCGAGCACG 540
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 524 ACGTCTCGCGCGCAGATGTGTCGTCGCGACCGCCATGATCCCTTCTCTGAGGACG 583
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 541 ACGACGCCCAACCGTCCCTCATGGTGCCAAACATGACGCGCAGGCGGTTCGCTGGTGC 600
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 584 ACGACGCCCAACCGTCCCTCATGGTGCCAAACATGACGCGCAGGCGGTTCGCTGGTGC 643
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 601 GTAGCGAGGCTCCGCTGTCGTTACC 626
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 644 GTAGCGAGGCTCCGCTGTCGTTACC 669
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

```

```

RESULT 2
US-09-103-840A-2
; Sequence 2, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2

```

```

; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 4403765
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; FEATURE:
; OTHER INFORMATION: CDC 1551
; OTHER INFORMATION: "n" bases at various positions throughout the sequence
; OTHER INFORMATION: represent a, t, c or g
US-09-103-840A-2

```

```

Query Match      76.7%; Score 480.4; DB 3; Length 4403765;
Best Local Similarity 85.5%; Pred. No. 1.7e-98;
Matches 535; Conservative 0; Mismatches 91; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCGTGGCGCGATCAAGGAGTCTTCGGAACCAAGCCAGCTGTCGAGATTCA 60
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 61 TGGACCAAGAACCAACCGCTGTCGGGCTTGACCCCAAGCGCTGTCGCGCTGGGCC 120
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 763065 TGGACCAAGAACCAACCGCTGTCGGGCTTGACCCCAAGCGCTGTCGCGCTGGGCC 763124
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 121 CCGGTGCTGACCGCTGACCGCGCGCTGCGAGTTCGCGACGCTGACCCCTCGCACT 180
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 763125 CCGCGGTCTGTACGTGAGCGTCCCGGCTGGAGTCCGCGACGTGACCCCTCGCACT 763184
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 181 ACGGCCCGATGTGCCCGATCGAGACCCCGGAAGGCCGAAACATCGGCCTGATCGGCTCGC 240
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 763185 ACGGCCCGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGC 763244
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 241 TGTGCGTGTACCGCGGTGCAACCGCTTCCGGTTTCATCGAGACGCTTACCGGAAGGTCT 300
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 763245 TGTGCGTGTACCGCGGTGCAACCGCTTCCGGTTTCATCGAAACCGCTTACCGGAAGGTG 763304
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 301 CGGACGAGTGTACCGACGACATCCACTACCTGACGCGCGAGCAAGAGACCGCCACG 360
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 763305 TCGACGCGGTGTAGCGACGAGATCGTGTACCTGACCGCGACGAGGAGACCGCCACG 763364
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 361 TGGTGGCGAGCCAACTCGCCGCTGGAGCGCAACCGCGCTTCAACCGAGGAGAGATCC 420
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 763365 TGGTGGCACAGGCCAAATTCGCGATCGATCGGAGCGTTCGTTCGACGCGCGCGTGC 763424
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 421 TGGTTCGCGCAAGGGCGGAGGTGAGTTCGTGTCGGGACCGAGTCTGACATACATGG 480
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 763425 TGGTTCGCGCAAGGGCGGAGGTGAGTTCGTGTCGGGACCGAGTCTGACATACATGG 763484
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 481 ATGTCCTCGCGCGCAGATGTGTCGTCGCGACCGCCATGATCCGTTCTCTCGAGCACG 540
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 763485 ACGTCTCGCGCGCAGATGTGTCGTCGCGACCGCCATGATCCCTTCTCTGAGGACG 763544
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 541 ACGACGCCCAACCGTCCCTCATGGTGCCAAACATGACGCGCAGGCGGTTCGCTGGTGC 600
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 763545 ACGACGCCCAACCGTCCCTCATGGTGCCAAACATGACGCGCAGGCGGTTCGCTGGTGC 763604
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 601 GTAGCGAGGCTCCGCTGTCGTTACC 626
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Qy 763605 GTAGCGAGGCTCCGCTGTCGTTACC 763630
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

```

```

RESULT 3
US-09-103-840A-1
; Sequence 1, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A

```

```
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      76.7%; Score 480.4; DB 3; Length 4411529;
Best Local Similarity 85.5%; Pred. No. 1.7e-98;
Matches 535; Conservative 0; Mismatches 91; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTGTGGGGCGATCAAGAGTCTTTCGGAAACGACGAGCTGTGCGAGTTCA 60
DB 761045 TCCGTCCTCGTGTGGGGCGATCAAGAGTCTTTCGGAAACGACGAGCTGTGCGAGTTCA 761104

QY 61 TGGACCAAGAACCAACCGCTGTGCGGCTTGACCAAGCGTGTGTCGCGGCTGGGCG 120
DB 761105 TGGACCAAGAACCAACCGCTGTGCGGCTTGACCAAGCGTGTGTCGCGGCTGGGCG 761164

QY 121 CCGGTGTGTGACCGGTGACCGCGCGCTCGAGTTCGCGACGTCGACCCCTCGCACT 180
DB 761165 CCGGTGTGTGACCGGTGACCGCGCGCTCGAGTTCGCGACGTCGACCCCTCGCACT 761224

QY 181 ACGGCGCGATGTGCGCGATCGAGACCCCGGAAGGCCGGAACATCGGCGCTGATCGGCTCGC 240
DB 761225 ACGGCGCGATGTGCGCGATCGAGACCCCGGAAGGCCGGAACATCGGCGCTGATCGGCTCGC 761284

QY 241 TGTGCGGTGTACCGCGGGGTCAACCGTTCGCGTTCATCGAGACGCTTACCGGAGGTCT 300
DB 761285 TGTGCGGTGTACCGCGGGGTCAACCGTTCGCGTTCATCGAGACGCTTACCGGAGGTCT 761344

QY 301 CGGACGAGTGTGTACCGACGACATCCACTACTGACCGCGCCGACGAAGAGGACCGCCACG 360
DB 761345 TCGACGCGGTGTGTAGCGACGAGATCGTACTGACCGCGCGACGAGGAGACCGCCACG 761404

QY 361 TGGTGGCGGACGCAACTCGCCGCTGAGACCGCAACGCGCGCTTACCGAGGAGAGATCC 420
DB 761405 TGGTGGCGGACGCAACTCGCCGCTGAGACCGCAACGCGCGCTTACCGAGGAGAGATCC 761464

QY 421 TGGTTCGCGCAAGCGCGCGAGGTGAGTTCGTCGCGACGACGAGTTCGACTACATGG 480
DB 761465 TGGTTCGCGCAAGCGCGCGAGGTGAGTTCGTCGCGACGACGAGTTCGACTACATGG 761524

QY 481 ATGTCTCGCGCGCGCAGATGTGTGCGTTCGCGACCGCCATGATCCCGTTCTCTCGAGACG 540
DB 761525 ACGTCTCGCGCGCGCAGATGTGTGCGTTCGCGACCGCCATGATCCCGTTCTCTCGAGACG 761584

QY 541 ACGACGCAACCGTGCCTCATGGGTGCCAATGACGCGCCAGCGGTTCGCTGGTGC 600
DB 761585 ACGACGCAACCGTGCCTCATGGGTGCCAATGACGCGCCAGCGGTTCGCTGGTGC 761644

QY 601 GTAGCGAGGCTCCGCTGCTGCTACC 626
DB 761645 GTAGCGAGGCTCCGCTGCTGCTACC 761670

RESULT 4
US-08-757-653-135
; Sequence 135, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
```

```
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-135

Query Match      75.2%; Score 470.6; DB 2; Length 620;
Best Local Similarity 85.5%; Pred. No. 8.2e-97;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTGTGGCGCGATCAAGGAGTCTTTCGGAACGACGAGCTGTGCGAGTTCA 60
DB 8 TCCGTCCTCGTGTGGCGCGATCAAGGAGTCTTTCGGAACGACGAGCTGTGCGAGTTCA 67

QY 61 TGGACCAAGAACCAACCGCTGTGCGGCTTGACCAAGCGCGCTGTGTCGCGGCTGGGCG 120
DB 68 TGGACCAAGAACCAACCGCTGTGCGGCTTGACCAAGCGCGCTGTGTCGCGGCTGGGCG 127

QY 121 CCGGTGTGTACCGGTGACCGCGCGCTCGAGTTCGCGAGTCCGAGCTGACCCCTCGCACT 180
DB 128 CCGGCGTGTGTACGAGTGTGCGGCTGCGGCTGCGAGTCCGCGACGCTGCGCTCGCACT 187

QY 181 ACGGCGCGATGTGCGCGATCGAGACCCCGGAAGGCCGGAACATCGGCTGTGCGCTCGC 240
DB 188 ACGGCGCGATGTGCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGC 247

QY 241 TGTGCGGTGACGCGGGGTCAACCGTTCGCTTTCATCGAGACGCTTACCGGAGGTCT 300
DB 248 TGTGCGGTGACGCGGGGTCAACCGTTCGCTTTCATCGAAACCGCTTACCGAAGGTGG 307

QY 301 CGGACGAGTGTGTACCGACGACATCCACTACTGACGCGCGAGCAAGAGGACCGCCACG 360
DB 308 TCGACGCGGTGTGTAGCGAGGATCGTGTACTGACCGCGCGAGGAGGACCGCCACG 367

QY 361 TGGTGGCGGACGCGCAACTCGCCCGTGGACGCGCAACGCGGCTTACCGAGGAGAGATCC 420
DB 368 TGGTGGCGGACGCGCAACTCGCCCGATCGATGCGGACGCTCGCTTCGTGCGCGCGCTGC 427

QY 421 TGGTTCGCGCGGCGCGGCGAGTGTGCTGCTGCGACGCGCTTACCGAGGAGATCGG 480
DB 428 TGGTTCGCGCGGCGCGGCGAGTGTGCTGCTGCGGCGCGAGTTCGCTTCTGAGGTGACTACATGG 487

QY 481 ATGTCTCGCGCGCGCAGATGTGTGCTGCTGCGACGCGCTATCCCGTTCTCTCGAGACG 540
DB 488 ACGTCTCGCCCGCGCAGATGTGTGCTGCTGCGGCGCAACCGCGATGATTCCTTCTGAGACG 547

QY 541 ACGACGCAACCGTGCCTCATGGGTGCCAATGACGCGCGAGCGGTTCGCTGGTGC 600
DB 548 ACGACGCAACCGTGCCTCATGGGTGCCAATGACGCGCGAGCGGTTCGCTGGTGC 607
```

```
Qy 601 GTAGCGAGGCTCC 613
Db 608 GTAGCGAGGCCCC 620

RESULT 5
US-08-757-653-138/c
; Sequence 138, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match 75.2%; Score 470.6; DB 2; Length 620;
Best Local Similarity 85.5%; Pred. No. 8.2e-97;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCCAGCTGTCGAGTTCA 60
Db 613 TCCGCGCGGTGGTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCCAGCTGAGCCAAATTCA 554
Qy 61 TGGACCAAGAAACCCCGGTGTGGGCGCTGACCCCAAGCGTGTCTGTCGGCGGTGGGCGC 120
Db 553 TGGACCAAGAAACCCCGGTGTGGGCGCTGACCCCAAGCGCGGACTGTGCGCGGTGGGCGC 494
Qy 121 CCGGTGGTCTGACCCGTCGACCGCGCGCGCTTCGAGGTCCGCGAGTCGACCCCTCGCACT 180
Db 493 CCGGCGGTCTGTACGTGAGCGTGGCGGCTGGAGGTCGCGAGCGTGCACCGTCGCACT 434
Qy 181 ACGGCGCGATGTGCGCGATCGAGACCCCGGAAGCCCGGAACATCGGCTGATCGGCTCGC 240
Db 433 ACGGCGCGATGTGCGCGATCGAGACCCCGGAAGCCCGGAACATCGGCTGATCGGCTCGC 374
Qy 241 TGTGGGTGACCGCGGTGCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGGTCT 300
Db 373 TGTGGGTGACCGCGGTGCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGGTGG 314
Qy 301 CGGACGGAGTTGTACCGACGACATCCACTACCTGACGGGCGGACGAAGAGACCGCCACG 360

Db 313 TCAGCGCGTGGTTAGCGACGAGATCGTGTACCTGACCGCGACGAGGAGACCGCCACG 254
Qy 361 TGGTGGCGCAGGCCAACTCGCCCGTGACCGCCACCGCGCGCTTCCACGAGGAGAAGATCC 420
Db 253 TGGTGGCACAGGCCAAATTCGCCGATCGATCGGACGGTCCGCTTCGTGAGCGCGCGTGC 194
Qy 421 TGGTTCGCCGCAAGGGCGGCGAGGTGAGTTCGTGTCGGCGACCGAGGTCCGACTACATGG 480
Db 193 TGGTTCGCCGCAAGGGCGGCGAGGTGAGTTCGTGTCGGCGACCGAGGTCCGACTACATGG 134
Qy 481 ATGTCTCGCCGCGCAGATGTTGTCGGTCGCGACCGCCATGATCCCGTTCTCGAGCACG 540
Db 133 ACGTCTCGCCGCGCAGATGTTGTCGGTCGCGACCGCCATGATCCCGTTCTCGAGCACG 74
Qy 541 ACGACGCCAACCGTGCCTCATGGTCCACATGACGAGCCGAGCGGTTCCGCTGTCG 600
Db 73 ACGACGCCAACCGTGCCTCATGGGCGCAACATGACGAGCCGAGCGGTTCCGCTGTCG 14
Qy 601 GTAGCGAGGCTCC 613
Db 13 GTAGCGAGGCCCC 1

RESULT 6
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

Query Match 75.2%; Score 470.6; DB 3; Length 620;
Best Local Similarity 85.5%; Pred. No. 8.2e-97;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCCAGCTGTCGAGTTCA 60
```

Db	8	TCCGGCGGTTGTCGCGCGGATCAAGGAGTTCTTTCGGCACCAAGCAGCTGAGCCAAATTCA	67
Qy	61	TGGACAGAAACAACCCGCTGTTCGGGCTTGACCCACAAGCGTCGTCTGTTCGGGCTGGGCG	120
Db	68	TGGACAGAAACAACCCGCTGTTCGGGCTTGACCCACAAGCGCGACTGTTCGGGCTGGGCG	127
Qy	121	CGGTTGCTGACCCGTTGACCGCGCGGCGCTCGAGGTCGCGACGTGCAACCCCTCGCACT	180
Db	128	CCGGCGGTTCTGCACGTGAGCGTTCGGGCTGGAGTCCGCGACGTGCAACCCCTCGCACT	187
Qy	181	ACGGCCGATGTGCCCGATCGAGACCCCGAAAGGCCGAAACATCGGCCCTGATCGGCTCGC	240
Db	188	ACGGCCGATGTGCCCGATCGAAAACCCCTGAGGGGCCAAACATCGGTCTGATCGGCTCGC	247
Qy	241	TGTCGGTTACCGCGGGGTCAACCCGTTTCGGTTTCATCGAGACGCTTACCAGAAAGTCT	300
Db	248	TGTCGGTTACCGCGGGGTCAACCCGTTTCGGTTTCATCGAAACGCCGTACCCGCAAGGTGG	307
Qy	301	CGGACGGAGTTGTCACGACGACATCCACTACTCGACGCGCGACGACGAGGACCCGACG	360
Db	308	TCGACGGCGTGTTAGCGACGAGATCGTGATCCTGACCGCGCAGGAGGACCCGCGACG	367
Qy	361	TGGTCGCGCAGCCAACTCGCCCGTGGACGCCAAACCGGCCGCTTCACCGAGGAGAAGATCC	420
Db	368	TGTTGGCACAGCCAAATTCGCCGATCGATCGGACGGTCTGTCGAGCGCCGCGTGC	427
Qy	421	TGGTTTCGCCGAAGGCGCGCGAGGTGGAGTTTCGTGTCCGCGACCGAGGTCGACTACATGG	480
Db	428	TGGTCCGCGCAAGCGCGGCGAGGTGGAGTTCGTGTCCTCGTCTGAGGTGGACTACATGG	487
Qy	481	ATGTCCTCCCGCGCGAGATGGTTCGTCGCGACCGCCATGATCCGTTCTCTCGAGCAGG	540
Db	488	ACGTCCTCCCGCGCGAGATGGTTCGTTGGCGCACCCGCGATGATTCCTTCCTGGAGCAG	547
Qy	541	ACGACGCCAAACCGTCCCTCATGGGTGCCAAACATGACAGCGCCAGCGGGTTCGCTGGTGC	600
Db	548	ACGACGCCAAACCGTCCCTCATGGGCGCCAAACATGACAGCGCCAGCGGGTTCGCTGGTGC	607
Qy	601	GTAGCGAGGCTCC	613
Db	608	GTAGCGAGGCCCC	620

RESULT 7

US-08-520-946-138/c
Sequence 138, Application US/08520946
Patent No. 6372424
GENERAL INFORMATION:
APPLICANT: BROW, MARY ANN D.
APPLICANT: LYAMICHEV, VICTOR I.
APPLICANT: OLIVE, DAVID M.
TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
TITLE OF INVENTION: PATHOGENS
NUMBER OF SEQUENCES: 160
CORRESPONDENCE ADDRESS:
ADDRESSEE: MEDLEN & CARROLL
STREET: 220 MONTGOMERY STREET, SUITE 2200
CITY: SAN FRANCISCO
STATE: CALIFORNIA
COUNTRY: UNITED STATES OF AMERICA
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: US/08/520,946
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: CARROLL, PETER G.
REGISTRATION NUMBER: 32,837

```

; REFERENCE/DOCKET NUMBER:  FORS-017566
;
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-138

```

Query Match	75.2%;	Score 470.6;	DB 3;	Length 620;
Best Local Similarity	85.5%;	Pred. NO. 8.2e-97;		
Matches 524;	Conservative 0;	Mismatches 89;	Indels 0;	Gaps 0;
Qy	1	TCCGTCCCGTCGTGGCGCGCATCAAGAGATTCTTCGGAACACAGCCAGCTGTGCGCAGTTCA	60	
Db	613	TCCGCGCGGTGGTCCGCGCATCAAGAGATTCTTCGGCACACAGCCAGCTGAGCCAAATTC	554	
Qy	61	TGGACCAAGAAACAACCCGCTGTGGGCGCTGACCAACAAGCGTGTGTGTCGGCGCTGGGGC	120	
Db	553	TGGACCAAGAAACAACCCGCTGTGGGCGTTGACCAACAAGCGCGCATGTGCGCGCTGGGGC	494	
Qy	121	CCGCTGTGTCGACCCGCTGACCGCGCGSCCTCGAGTCCGGAGCTGCAACCCCTCGCACT	180	
Db	493	CCGCGCGTCTGTCACTGTAGCGTCCGGGCTGGAGGTCCTGCACTGCAACCGTGCACCT	434	
Qy	181	ACGCGCCGATGTGCCGATCGAGACCCCGAAGGCCCAACATCGCCCTGTATCGGCTCGC	240	
Db	433	ACGCGCCGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGTATCGGCTCGC	374	
Qy	241	TGTCGCTGTAAGCGCGGGTCAACCGTTTCGCTTTTCATCGAGAGCGCTTACCGGAAGGTCT	300	
Db	373	TGTCGCTGTACGCGCGGGTCAACCCGTTTCGCGGTTTCATCGAAACCGCGTACCGCAAGGTGG	314	
Qy	301	CGGACGGAGTTGTCAACGACACATCCACTACCTGACCGCCGACGAAGAGGACCGCCACG	360	
Db	313	TCGACGCGGTGTTAGCGACGAGATCGTGTACCTGACCGCCGACGAGGAGGACCGCCACG	254	
Qy	361	TGTTGGCGCAGGCCAACTCGCCCTGGACGCCCAACGGCCGCTTACCGAGGAGAAGATCC	420	
Db	253	TGTTGGCACAAGGCCAAATTCGCCGATCGATGCGGACGCTCGCTTGTGCGAGCGCGCTGC	194	
Qy	421	TGCTTCGCGCAAGCGCGCGAGGTGAGTTTCGTGTGCGGCACCGAGGTCACTACATGG	480	
Db	193	TGTTCCGCGCAAGCGCGCGAGTGGAGTACGTGCCCTCGTCTGAGTGGACTACATGG	134	
Qy	481	ATGTCCTCGCGCGCAGATGTTGCGTTCGGCACCGCCATGATCCCGTTCCTCGAGCAGC	540	
Db	133	ACGTCCTCGCCCCGACATGTTGCTGGTGGCCACCGCGATGATTCCTTCCTGGAGCAGC	74	
Qy	541	ACGAGCGCAACCGTGCCTCATGGGTGCAACATGTCAGCGCCAGCGCGTTCGCTGGTGC	600	
Db	73	ACGAGCGCAACCGTGCCTCATGGGGGCAACATGTCAGCGCCAGCGCGTTCGCTGGTGC	14	
Qy	601	GTACGAGGCTCC	613	
Db	13	GTACGAGGCCCC	1	

RESULT. T 8

```

RESULT 8
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; LYAMICHEV, VICTOR I.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165

```

```

CORRESPONDENCE ADDRESS:
ADDRESSEE: MEDLEN & CARROLL
STREET: 220 MONTGOMERY STREET, SUITE 2200
CITY: SAN FRANCISCO
STATE: CALIFORNIA
COUNTRY: UNITED STATES OF AMERICA
ZIP: 94104

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/655,378A
FILING DATE: 05-Sep-2000
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: CARROLL, PETER G.
REGISTRATION NUMBER: 32,837
REFERENCE/DOCKET NUMBER: FORS-01756
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 705-8410
INFORMATION FOR SEQ ID NO: 135:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match 75.2%; Score 470.6; DB 4; Length 620;
Best Local Similarity 85.5%; Pred. No. 8.2e-97;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

Qy 1 TCCGTCCCGTCTGTCGGCGCGATCAAGGAGTCTTCGGAAACGACGCGTTCGCGAGTTCA 60
Db 8 TCCGCGCGTGTGTCGGCGCGATCAAGGAGTCTTCGGCAACGACGCGTTCGCGAGTTCA 67
Qy 61 TGGACCAAGAAACCCCGTGTGCGGCGCTGACCCACAAAGCGTCTGTCGCGCGCTGGGCC 120
Db 68 TGGACCAAGAAACCCCGTGTGCGGCGCTGACCCACAAAGCGCGTGTGCGCGCTGGGCC 127
Qy 121 CCGGTGCTGACCGCGTACCGCGCGCGCTCGAGGTCGGGCGTGCACCCCTCGCACT 180
Db 128 CCGGCGGTCTGTACGTGAGCGTGCCTGGGCTGGAGGTCGGGCGTGCACCCCTCGCACT 187
Qy 181 ACGGCCGCGATGTGCCCGATCGAGACCCCGGAAGCCCGAATCATCGGCTGATCGGCTCGC 240
Db 188 ACGGCCGCGATGTGCCCGATCGAAGCCCTGAGGGGCCCAATCATCGGCTGATCGGCTCGC 247
Qy 241 TGTGCGGTGTACGCGCGGTCAACCCGTTTCGTTTCATCGAGACGCTTTACCGGAAGTCT 300
Db 248 TGTGCGGTGTACGCGCGGTCAACCCGTTTCGTTTCATCGAAGCGCGTACCGCAAGGTG 307
Qy 301 CGGACGAGTGTACACGACGACATCCACTACCTGACGCGCGCGAGAGAGAGACCGCCACG 360
Db 308 TCGACGCGGTGTGTAGCCAGCAGATCGTGTACCTGACCGCGCGAGAGAGACCGCCACG 367
Qy 361 TGGTGGCGCAGGCCAACTCGCGCGTGGACGCAACCGCGCGTTCACCGAGGAGAGATCC 420
Db 368 TGGTGGCACAGGCCAAATTCGCGGATCGATCGGACGGTTCGTCGACGCGCGCGTGC 427
Qy 421 TGGTTCGCGCGAAGCGCGCGAGTGTGAGTTCGTTTCGTCGCGCGACCGAGTCAATG 480
Db 428 TGGTTCGCGCGAAGCGCGCGAGTGTGAGTTCGTTTCGTTTCGTTTCGTTTCGTTTCG 487
Qy 481 ATGTCCTCCCGCGCGCAGATGTGTGCGTTCGCGACCGCATCATCCGTTCTCGAGCACG 540
Db 488 AGTCTCTCCCGCGCGCAGATGTGTGCGTTCGCGACCGCATCATCCGTTCTCGAGCACG 547

CORRESPONDENCE ADDRESS:
ADDRESSEE: MEDLEN & CARROLL
STREET: 220 MONTGOMERY STREET, SUITE 2200
CITY: SAN FRANCISCO
STATE: CALIFORNIA
COUNTRY: UNITED STATES OF AMERICA
ZIP: 94104

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/655,378A
FILING DATE: 05-Sep-2000
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: CARROLL, PETER G.
REGISTRATION NUMBER: 32,837
REFERENCE/DOCKET NUMBER: FORS-01756
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 705-8410
INFORMATION FOR SEQ ID NO: 135:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match 75.2%; Score 470.6; DB 4; Length 620;
Best Local Similarity 85.5%; Pred. No. 8.2e-97;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

Qy 1 TCCGTCCCGTCTGTCGGCGCGATCAAGGAGTCTTCGGAAACGACGCGTTCGCGAGTTCA 60
Db 8 TCCGCGCGTGTGTCGGCGCGATCAAGGAGTCTTCGGCAACGACGCGTTCGCGAGTTCA 67
Qy 61 TGGACCAAGAAACCCCGTGTGCGGCGCTGACCCACAAAGCGTCTGTCGCGCGCTGGGCC 120
Db 68 TGGACCAAGAAACCCCGTGTGCGGCGCTGACCCACAAAGCGCGTGTGCGCGCTGGGCC 127
Qy 121 CCGGTGCTGACCGCGTACCGCGCGCGCTCGAGGTCGGGCGTGCACCCCTCGCACT 180
Db 128 CCGGCGGTCTGTACGTGAGCGTGCCTGGGCTGGAGGTCGGGCGTGCACCCCTCGCACT 187
Qy 181 ACGGCCGCGATGTGCCCGATCGAGACCCCGGAAGCCCGAATCATCGGCTGATCGGCTCGC 240
Db 188 ACGGCCGCGATGTGCCCGATCGAAGCCCTGAGGGGCCCAATCATCGGCTGATCGGCTCGC 247
Qy 241 TGTGCGGTGTACGCGCGGTCAACCCGTTTCGTTTCATCGAGACGCTTTACCGGAAGTCT 300
Db 248 TGTGCGGTGTACGCGCGGTCAACCCGTTTCGTTTCATCGAAGCGCGTACCGCAAGGTG 307
Qy 301 CGGACGAGTGTACACGACGACATCCACTACCTGACGCGCGCGAGAGAGAGACCGCCACG 360
Db 308 TCGACGCGGTGTGTAGCCAGCAGATCGTGTACCTGACCGCGCGAGAGAGACCGCCACG 367
Qy 361 TGGTGGCGCAGGCCAACTCGCGCGTGGACGCAACCGCGCGTTCACCGAGGAGAGATCC 420
Db 368 TGGTGGCACAGGCCAAATTCGCGGATCGATCGGACGGTTCGTCGACGCGCGCGTGC 427
Qy 421 TGGTTCGCGCGAAGCGCGCGAGTGTGAGTTCGTTTCGTTTCGTCGCGCGACCGAGTCAATG 480
Db 428 TGGTTCGCGCGAAGCGCGCGAGTGTGAGTTCGTTTCGTTTCGTTTCGTTTCGTTTCG 487
Qy 481 ATGTCCTCCCGCGCGCAGATGTGTGCGTTCGCGACCGCATCATCCGTTCTCGAGCACG 540
Db 488 AGTCTCTCCCGCGCGCAGATGTGTGCGTTCGCGACCGCATCATCCGTTCTCGAGCACG 547
```

241	Qy	TGTCGGTGTACGGCGGGGTCAACCCGGTTCGGTTTCATCGAGACGCCTTACCGGAAGGTCT	300
373	Db	TGTCGGTGTACGGCGGGGTCAACCCGGTTCGGTTTCATCGAAGACCGGTACCGCAAGGTGG	314
301	Qy	CGGACGGAGTTGTCAACCGACGACATCCACTACTGACGGCCGACGAAGAGACCGCCACG	360
313	Db	TCGACGGCGTGTATTAGCAGCAGATCTGTGTACTTGCACGCCGACGAGGAGACCGCACG	354
361	Qy	TGTTGGCGCAGGCCCAACTCGCCCGTGGACGCCCAACGGCCGCTTCACCGAGGAGAAGATCC	420
253	Db	TGTTGGCAACGAGCCAAATTCGCCGATCGATCGGACGGTTCGCTTCGTACGCCGCGGTGC	194
421	Qy	TGTTTCGCCGCAAGGGCGGCGAGGTGGAGTTCTGTGTGGCGACCGAGGTGCATACATGG	480
193	Db	TGTTTCGCCGCGCAAGGCGGCGGAGGTGGAGTACGTGCTCCTGTCTGAGGTGGATACATGG	134
481	Qy	ATGTCCTCGCGCGCCAGATGGTGTCTGGTTCGGACGCGCATGATCCCGTTTCCTCGACACG	540
133	Db	ACGTCTTCGCCCGCCAGATGGTGTCTGGTGGCCACCGCGATGATTCCTTCCTGGAGACG	74
541	Qy	ACGACGCCCAACCGTGCCTTCATGGGTGCCAAACATGCAGCGCCAGGCGGTTTCGCTCGTGC	600
73	Db	ACGACGCCCAACCGTGCCTTCATGGGTGCCAAACATGCAGCGCCAGGCGGTCCTCGTGC	14
601	Qy	GTAGCAGGCTCC	613
13	Db	GTAGCAGGCCCC	1

```

RESULT 10
US-08-757-653-136
; Sequence 136, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 136:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-136

```

Query Match 74.9%; Score 469; DB 2; Length 620;

Best Local Similarity		85.3%	Pred. No. 1.9e-96;
Matches	523;	Conservative	0; Mismatches 90; Indels 0; Gaps 0
Qy	1	TCCGTC	CCGTCGTCGGCGCGATCAAGAGATTCTTCGGAACAGGCAGCTGTGCGAGTTCA 60
Db	8	TCCGCGCGGTG	TCGCCCGGATCAAGAGATTCTTCGCGACAGCCAGCTGAGCCAAATTCA 67
Qy	61	TGGACGAGAA	CAACCCGCTGTGCGGCTTGACCCAAGAGCTGCTGTGCGGCGCTGGGCG 120
Db	68	TGGACGAGAA	CAACCCGCTGTGCGGCTTGACCTCAAGCGCCGACTGTGCGGCTGGGCG 127
Qy	121	CCGCTGCTG	TGACCCGCTGACCGCGCGGCTCGAGGTCGCGAGCTGCAACCCCTCGCACT 180
Db	128	CCGCGCTGT	GTACGTGAGCTGCCGGCTCGGAGTCTGGAGTCCGCGAGCTGCAACCCCTCGCACT 187
Qy	181	ACGCGCCGAT	TGTCGCCGATCGAGACCCCGGAAGGCCGAAACATCGGCGCTGATCGGCTCGC 240
Db	188	ACGCGCGGAT	TGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGC 247
Qy	241	TGTCGCTGT	TACGCGCGGTCAAACCCGTTCCGTTTCATCGAGACGCTTTACCGGAAGTCT 300
Db	248	TGTCGCTGT	TACGCGCGGTCAAACCCGTTCCGTTTCATCGAAACGCGTACCGCAAGTGG 307
Qy	301	CGGACGAGT	TGTACCGAGACATCACAATCTGACGGCGGACGAGAGAGACGCCACG 360
Db	308	TCGACGCGT	TGTAGCGAGATCGGTACTCTGACCGCGGACGAGAGAGACGCCACG 367
Qy	361	TGTTGGCGC	AGGCGCAATCTCGCCCGTGGAACGCGCCGCTTCCACCGAGAGAAGATCC 420
Db	368	TGTTGGCAG	CAGGCCAATCTCGCCGATCGATCGGACGGTTCGTTCTGTCGAGCCGCGTGC 427
Qy	421	TGTTTCCCG	CAGAGCGGCGAGGTGAGTTCTGTGTCGGCGACCGAGGTTCGACTACATGG 480
Db	428	TGTTCCCGC	CAAGCGGCGGAGGTGAGTACGTGCCCTCTCTCTGAGGTGGACTACATGG 487
Qy	481	ATGTTCTCG	CGCGCCAGATGGTCTCGGTTCGGACCGGCATGATCCCGTTCTCTCGAGCACG 540
Db	488	ACGTCTCGC	CGCCGAGATGGTGTCTGTGCGTACCGCGATGATTCCTTCTCTGAGCACG 547
Qy	541	ACGACGCCAA	CCGTCGCTCATGGTGCCAAACATGACAGCGCCAGCGGTTCCGCTGGTGGC 600
Db	548	ACGACGCCAA	CCGTCGCTCATGGTGCCAAACATGACAGCGCCAGCGGTTCCGCTGGTGGC 607
Qy	601	GTACGAGG	TCC 613
Db	608	GTACGAGG	TCC 620

```

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000
1001
1002
1003
1004
1005
1006
1007
1008
1009
1010
1011
1012
1013
1014
1015
1016
1017
1018
1019
1020
1021
1022
1023
1024
1025
1026
1027
1028
1029
1030
1031
1032
1033
1034
1035
1036
1037
1038
1039
1040

```

```
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 137:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-137

Query Match      74.9%; Score 469; DB 2; Length 620;
Best Local Similarity 85.3%; Pred. No. 1.9e-96;
Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTGTGGCGCGATCAAGGAGTTCCTTCGGAACACGACGCTGCGCAGTTCA 60
DB 8 TCCGCGCGGTGGTCCGCCGATCAAGGAGTTCCTTCGGAACACGACGCTGAGCCAAATTCA 67

QY 61 TGGACCAAGAACAAACCCGCTGTCCGGCCCTGACCCACAAGCGTCTGTGTCGGCGCTGGGCC 120
DB 68 TGGACCAAGAACAAACCCGCTGTCCGGGTTGACCCACAAGCGCGACTGTGGCGCTGGGCC 127

QY 121 CCGGTGGTCTGACCCGCTGACCGCGCGCGCTCGAGGTCGGGACGTGCACCCCTCGCACT 180
DB 128 CCGCGCGTCTGTACGTGAGCGTGCAGGCTCGAGGTCGGGACGTGCACCCGCTCGCACT 187

QY 181 ACGGCGCGATGTGCCCGATCGAGACCCCGGGAAGCCGGAACATCGGCTGTATCGGCTCGC 240
DB 188 ACGGCGCGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGCTGTATCGGCTCGC 247

QY 241 TGTCCGTGTAGCGCGGGTCAACCCGTTCCGTTTCATCGAGACGCTTACCGGAAGTCT 300
DB 248 TGTCCGTGTAGCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCGCTACCGGAAGTGG 307

QY 301 CGGACCGAGTTGTACACGACGATCTCACTACCTGACGCGCGGACGGAAGAGACCGCCACG 360
DB 308 TCGACCGCGTGGTTAGCGACGAGATCGTGTACCTGACCGCGACGAGGAGACCGCCACG 367

QY 361 TGGTGGCGGACGCAACTCGCCGTTGGAGCGCAACGCGCGCTTACCGAGGAGATCC 420
DB 368 TGGTGGCACAGGCGCAATTCGCCGATCGATGCGGACGCTCGCTTCGTCGAGCGCGCGTGC 427

QY 421 TGGTTCGCGCGAAGGCGCGAGGTGGAGTTCTGTCTCGGCGACCGAGGTCGACTACATGG 480
DB 428 TGGTTCGCGCGAAGGCGCGAGGTGGAGTTCTGTCTCGGCGACCGAGGTCGACTACATGG 487

QY 481 ATGCTTCGCGCGCGCAGATGGTGTGCGGTTCGCGACCGCCATGATCCCGTTCTCGAGCACG 540
DB 488 ACGTCTCGCGCGCGCAGATGGTGTGCGGTTCGCGACCGCGATGATTCCTTCCTGGAGCACG 547

QY 541 ACGAGCCCAACCGTCCCTCATGGTGCCAAATGCAATGCAAGCGCGCGGTCGCTGTGGTC 600
DB 548 ACGAGCCCAACCGTCCCTCATGGGGGCAAAATGCAAGCGCGCGGTCGCTGTGGTC 607

QY 601 GTAGCGAGGCTCC 613
DB 608 GTAGCGAGGCTCC 620
```

RESULT 12

```
US-08-757-139/c
; Sequence 139, Application US/08757653
; Patent No. 5843689
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
```

```
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 139:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-139
```

```
Query Match      74.9%; Score 469; DB 2; Length 620;
Best Local Similarity 85.3%; Pred. No. 1.9e-96;
Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTGTGGCGCGATCAAGGAGTTCCTTCGGAACACGACGCTGCGCAGTTCA 60
DB 613 TCCGCGCGGTGGTCCGCCGATCAAGGAGTTCCTTCGGAACACGACGCTGAGCCAAATTCA 554

QY 61 TGGACCAAGAACAAACCCGCTGTCCGGCCCTGACCCACAAGCGTCTGTGTCGGCGCTGGGCC 120
DB 553 TGGACCAAGAACAAACCCGCTGTCCGGGTTGACCTACAAGCGCGCGACTGTGGCGCTGGGCC 494

QY 121 CCGGTGGTCTGACCCGCTGACCGCGCGCGCTCGAGGTCGCGACGCTGCACCCCTCGCACT 180
DB 493 CCGCGCGTCTGTACGCTGAGCGTGCAGGCTCGCGGCTGGAGGTCGCGACGCTGCACCCGCTCGCACT 434

QY 181 ACGGCGCGATGTGCCCGATCGAGACCCCGGGAAGCCCGGAACATCGGCGCTGTATCGGCTCGC 240
DB 433 ACGGCGCGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGCTGTATCGGCTCGC 374

QY 241 TGTCCGTGTAGCGCGGGTCAACCCGTTCCGTTTCATCGAGACGCTTACCGGAAGTCT 300
DB 373 TGTCCGTGTAGCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCGCTACCGGAAGTGG 314

QY 301 CGGACCGAGTTGTACCGACGACATCCACTACCTGACGCGCGCGACGGAAGAGACCGCCACG 360
DB 313 TCGACCGCGTGGTTAGCGACGAGATCGTGTACCTGACCGCGCGAGGAGACCGCCACG 254

QY 361 TGGTGGCGGACGCAACTCGCCCGTGAACGCGCAACGCGCGCTTACCGAGGAGATCC 420
DB 253 TGGTGGCACAGGCGCAATTCGCCGATCGATCGGACGCGTTCGCTTCGTCGAGCGCGCGTGC 194

QY 421 TGGTTCGCGCGAAGGCGCGAGGTGGAGTTCTGTCTCGGCGACCGAGGTCGACTACATGG 480
DB 193 TGGTTCGCGCGAAGGCGCGAGGTGGAGTTCTGTCTCGGCGACCGAGGTCGACTACATGG 134
```


QY 481 ATGCTCGCGCGCCAGATGTTGCTCGGTCGACCCCGCATGATCCGTTCTCTCGAGCAG 540
Db 133 AGCTCTCGCGCGCCAGATGTTGCTCGGTCGACCCCGCATGATCCGTTCTCTCGAGCAG 74
QY 541 ACGACGCCAACCGTGCCTCATGGGTGCCAACATGACGCGCCAGGGCGTTCCGCTGGTGC 600
Db 73 ACGACGCCAACCGTGCCTCATGGGTGCCAACATGACGCGCCAGGGCGTTCCGCTGGTGC 14
QY 601 GTAGCGAGGCTCC 613
Db 13 GTAGCGAGGCTCC 1
RESULT 13
US-08-757-653-140/c
; Sequence 140, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichiev, Victor I.
; APPLICANT: Lyamichiev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable PEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 140:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-140
Query Match 74.9%; Score 469; DB 2; Length 620;
Best Local Similarity 85.3%; Pred. No. 1.9e-96;
Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;
QY 1 TCGCTCCGCTGTCGGCGGATCAAGGAGTTCTTGGACACGACGAGCTGTGCGAGTCA 60
Db 613 TCGCGCGGTGTCGCGCGGATCAAGGAGTTCTTGGACACGACGAGCTGTGCGAGTCA 554
QY 61 TGGACCAAGAACCGCTGTCGGGCTGACCCCAAGCGTCTGTGCGGGCTGGGCG 120
Db 553 TGGACCAAGAACCGCTGTCGGGTTGACCCCAAGCGCGACTGTGGCGCTGGGCG 494
QY 121 CCGGTGTTGACCCCGTACCGCGCGGCTCGAGGTCCGCGACGTGACCCCTCGCACT 180
Db 493 CCGCGGCTGTGTCAGTGTGAGCTGCGGGCTGAGGTCCGCGACGTGCACTGCACT 434
QY 181 ACGGGCGCATGTGCCCGATCGAGACCCCGGAAGGCCGGAACATCGGCGCTGATCGGCTCGC 240

Db 433 ACGGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGC 374
QY 241 TGTCCGTTAGCGCGCGGTCAACCCGTTTCGTTTCATCGAGACGCTTTACCGGAAGGTCT 300
Db 373 TGTCCGTTAGCGCGCGGTCAACCCGTTTCGTTTCATCGAAACGCGCTACCGCAAGGTGG 314
QY 301 CGGACGAGTTGTCAACCGACGACATCTACCTGACGCGCGCGACGAAGAGGACCGGACG 360
Db 313 TCGACGCGGTGTTAGCGACGAGATCGTGTACCTGACCGCGCGACGAGGAGGACCGCCACG 254
QY 361 TGTGGCGCGAGCCAACTCGCCGTCGAGCGCAACCGCGGCTTCAACCGAGGAGAGATCC 420
Db 253 TGTGGCACAGCCAACTTCGCCGATCGATGCGGACGCTTCGTTCTGAGCGCGCGGTGC 194
QY 421 TGTTCGCGCAAGCGCGCGAGGTGAGTTCGTGTCGCGGACCGCCATGATCCGTTCTCGAGCAG 480
Db 193 TGTTCGCGCAAGCGCGCGAGGTGAGTTCGTGTCGCGGACCGCCATGATCCGTTCTCGAGCAG 134
QY 481 ATGCTCGCGCGCGCGAGATGTTGCTCGGTCGCGACCGCCATGATCCGTTCTCGAGCAG 540
Db 133 ACGTCTCGCGCGCGAGATGTTGCTCGGTCGCGACCGCCATGATCCGTTCTCGAGCAG 74
QY 541 ACGACGCCAACCGTGCCTCATGGGTGCCAACATGACGCGCGCGGTTCCGCTGGTGC 600
Db 73 ACGACGCCAACCGTGCCTCATGGGTGCCAACATGACGCGCGCGGTTCCGCTGGTGC 14
QY 601 GTAGCGAGGCTCC 613
Db 13 GTAGCGAGGCTCC 1
RESULT 14
US-08-520-946-136
; Sequence 136, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 136:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)

US-08-520-946-136

```
Query Match          74.9%; Score 469; DB 3; Length 620;
Best Local Similarity 85.3%; Pred. No. 1.9e-96;
Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCTTCGGAACCCAGCCAGCTGTCGAGTTCA 60
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
8 TCCGCGCGTGGTCCCGCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGCCAATTCA 67
Qy 61 TGGACCAAGAACACCCGCTGTCGGGCTTGACCCACAAGCGTCTGTCGGCGCTGGCC 120
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
68 TGGACCAAGAACACCCGCTGTCGGGTTGACCTACAAGCGCGACTGTCGGCGCTGGGGC 127
Qy 121 CGGTGGTCTGACCGCTGACCGCGCGCTCGAGGTCGGAGTCCGACGTGCACCCCTCGCACT 180
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
128 CGGCGGTCTGTACGTGAGGTGCGGGCTGGAGGTCGGACGTGCACCCGCTGCGACT 187
Qy 181 ACGCCCGGATGTCCCGATCGAGACCCCGGAAGGCCCGAAACATCGGCTGATCGGCTCGC 240
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
188 ACGCCCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTGC 247
Qy 241 TGTGGTGTACGGCGGGTCAACCCGTTCCGATCGAGACGCTTACCGGAAGTCT 300
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
248 TGTGGTGTACGGCGGGTCAACCCGTTCCGATCGAGACGCTTACCGGAAGTCT 307
Qy 301 CGGACGGAGTTGTCAACCGAGACATCCACTACCTGACGGCGGACGAGAGACGCCACG 360
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
308 TCGACGGCGTGTAGCGACGAGATCGTGTACTGACCGCGGCTGCTGCTGAGCGCGGTGC 367
Qy 361 TGGTGGCGAGCCAACTCGCCCTGAGACCCCGGAAGGCCCGAAACATCGGCTGATCGGCTGC 240
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
488 ACGTCTCGCCCGCGAGATGTGTGCGTGCGGACCGCATGATCCCGTTCTCGAGCAG 547
Qy 541 ACGACGCAACCGTCCCTCATGGTGCCAAATGACGCGCAGCGGTTCCGCTGGTGC 600
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
548 ACGACGCAACCGTCCCTCATGGGGGCAAAATGACGCGCAGCGGTGCGGCTGGTCC 607
Qy 601 GTAGCGAGGCTCC 613
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
608 GTAGCGAGGCCCC 620
```

RESULT 15

```
US-08-520-946-137
; Sequence 137, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
```

```
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/520,946
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: CARROLL, PETER G.
REGISTRATION NUMBER: 32,837
REFERENCE/DOCKET NUMBER: FORS-01756
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 137:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-520-946-137
```

```
Query Match          74.9%; Score 469; DB 3; Length 620;
Best Local Similarity 85.3%; Pred. No. 1.9e-96;
Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCGTGGCGCGATCAAGGAGTTCTTCGGAACCCAGCCAGCTGTCGAGTTCA 60
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
8 TCCGCGCGTGGTCCCGCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGCCAATTCA 67
Qy 61 TGGACCAAGAACACCCGCTGTCGGGCTTGACCCACAAGCGTCTGTCGGCGCTGGCC 120
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
68 TGGACCAAGAACACCCGCTGTCGGGTTGACCCACAAGCGCGACTGTCGGCGCTGGGGC 127
Qy 121 CGGTGGTCTGACCGCTGACCGCGCGCTCGAGGTCGGAGTCCGACGTGCACCCCTCGCACT 180
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
128 CGGCGGTCTGTACGTGAGGTGCGGGCTGGAGGTCGGACGTGCACCCGCTGCGACT 187
Qy 181 ACGCCCGCATGTGTCGCGATCGAGACCCCGGAAGGCCCGAAACATCGGCTGATCGGCTGC 240
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
188 ACGCCCGCATGTGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTGC 247
Qy 241 TGTGGTGTACGGCGGGTCAACCCGTTCCGATCGAGACGCTTACCGGAAGTCT 300
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
248 TGTGGTGTACGGCGGGTCAACCCGTTCCGATCGAGACGCTTACCGGAAGTCT 307
Qy 301 CGGACGGAGTTGTCAACCGAGACATCCACTACCTGACGGCGGACGAGAGACGCCACG 360
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
308 TCGACGGCGTGTAGCGACGAGATCGTGTACTGACCGCGGCTGCTGCTGAGCGCGGTGC 367
Qy 361 TGGTGGCGAGCCAACTCGCCCTGAGACCCCGGAAGGCCCGAAACATCGGCTGATCGGCTGC 420
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
368 TGGTGGCACAGGCCAAATTCGCCGATCGATCGGACGGTCTGCTCGAGCGCGGTGC 427
Qy 421 TGGTTCGCGCAAGGGCGGGAGGTGGAGTTCGTGTCGGGACCGAGTCTGACTACATGG 480
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
428 TGGTTCGCGCAAGGGCGGGAGGTGGAGTTCGTGTCGGGACCGAGTCTGCTGAGTGTGACTACATGG 487
Qy 481 ATGTCTCGCCCGCGAGATGTGTGCGTGCGGACCGCATGATCCCGTTCTCGAGCAG 540
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
488 ACGTCTCGCCCGCGAGATGTGTGCGTGCGGACCGCATGATCCCGTTCTCGAGCAG 547
Qy 541 ACGACGCAACCGTCCCTCATGGTGCCAAATGACGCGCAGCGGTTCCGCTGGTGC 600
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
548 ACGACGCAACCGTCCCTCATGGGGGCAAAATGACGCGCAGCGGTGCGGCTGGTCC 607
Qy 601 GTAGCGAGGCTCC 613
Db | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
608 GTAGCGAGGCCCC 620
```

Search completed: August 24, 2005, 22:24:02
Job time : 103.866 secs

Query Match	100.0%;	Score 626;	DB 9;	Length 626;
Best Local Similarity	100.0%;	Pred. No. 2.1e-151;		
Matches 626;	Conservative	0;	Mismatches	0; Indels 0; Gaps 0;
QY	1	TCCGTCCCGTCGTGGGGCGGATCAAGAGATTCTTCGGAACACGCCAGCTCTCCGAGTTCA	60	
Db	1	TCCGTCCCGTCGTGGGGCGGATCAAGAGATTCTTCGGAACACGCCAGCTCTCCGAGTTCA	60	

```
QY 61 TGGACCAAGAACCCCGCTGTGCGGCCCTGAACCAAGCGTGTGTGTCGGCGCTGGGCC 120
Db |||
61 TGGACCAAGAACAAACCGCTGTGCGGCCCTGAACCAAGCGTGTGTGTCGGCGCTGGGCC 120
QY 121 CCGTGTGTCTGACCCGCTGACCGCGCGCGCTGAGGTCGGGACGTGACACCCCTCGCACT 180
Db |||
121 CCGTGTGTCTGACCCGCTGACCGCGCGCGCTGAGGTCGGGACGTGACACCCCTCGCACT 180
QY 181 ACGGCGCATGTGCCCGATCGAGACCCCGGAAGGCCGGAACATCGGCCTGTATCGGCTCGC 240
Db |||
181 ACGGCGCATGTGCCCGATCGAGACCCCGGAAGGCCGGAACATCGGCCTGTATCGGCTCGC 240
QY 241 TGTCCGTTGACCGCGGCTCAACCCGTTCCGTTTCATCGAGACGCTTTACCGGAAGGTCT 300
Db |||
241 TGTCCGTTGACCGCGGCTCAACCCGTTCCGTTTCATCGAGACGCTTTACCGGAAGGTCT 300
QY 301 CGGACGGAGTTGTACCCAGACATCCACTACCTGACGGCCGACGAAGAGACCGCCACG 360
Db |||
301 CGGACGGAGTTGTACCCAGACATCCACTACCTGACGGCCGACGAAGAGACCGCCACG 360
QY 361 TGGTGGCGCAGGCCAACTCGCCGCTGGACGCCAACCGCGCTTCAACGAGGAGAAGATCC 420
Db |||
361 TGGTGGCGCAGGCCAACTCGCCGCTGGACGCCAACCGCGCTTCAACGAGGAGAAGATCC 420
QY 421 TGGTTCCGCCCAAGGGCGGAGTGGAGTTGTTGTCGGCAGCCAGGTGCACTACATGG 480
Db |||
421 TGGTTCCGCCCAAGGGCGGAGTGGAGTTGTTGTCGGCAGCCAGGTGCACTACATGG 480
QY 481 ATGTTCCGCCCGCCAGATGTTGTTGTCGGTCGGACCGCCATCATCCGTTCTCGAGCACG 540
Db |||
481 ATGTTCCGCCCGCCAGATGTTGTTGTCGGTCGGACCGCCATCATCCGTTCTCGAGCACG 540
QY 541 ACGACGCCAAACCGTCCCTCATGGTGCACATGTCAGCGCAGCGGTTCCGCTGGTGC 600
Db |||
541 ACGACGCCAAACCGTCCCTCATGGTGCACATGTCAGCGCAGCGGTTCCGCTGGTGC 600
QY 601 GTAGCGAGGCTCCGCTGTCGTTACC 626
Db |||
601 GTAGCGAGGCTCCGCTGTCGTTACC 626
```

RESULT 2

```
US-09-285-306-47
; Sequence 47, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 47
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-47
```

```
Query Match 100.0%; Score 626; DB 9; Length 626;
Best Local Similarity 100.0%; Pred. No. 2.1e-151;
Matches 626; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTGGCGCGCATCAAGGAGTTCTTCGGAACACGACGAGTGTGCGAGTTCA 60
Db 1 TCCGTCCTCGTGGCGCGCATCAAGGAGTTCTTCGGAACACGACGAGTGTGCGAGTTCA 60
QY 61 TGGACCAAGAACCCCGCTGTGCGGCCCTGAACCAAGCGTGTGTGTCGGCGCTGGGCC 120
Db |||
```

```
Db 61 TGGACCAAGAACCCCGCTGTGCGGCCCTGAACCAAGCGTGTGTGTCGGCGCTGGGCC 120
QY 121 CCGTGTGTCTGACCCGCTGACCGCGCGCGCTGAGGTCGGGACGTGACACCCCTCGCACT 180
Db |||
121 CCGTGTGTCTGACCCGCTGACCGCGCGCGCTGAGGTCGGGACGTGACACCCCTCGCACT 180
QY 181 ACGGCGCATGTGCCCGATCGAGACCCCGGAAGGCCGGAACATCGGCCTGTATCGGCTCGC 240
Db |||
181 ACGGCGCATGTGCCCGATCGAGACCCCGGAAGGCCGGAACATCGGCCTGTATCGGCTCGC 240
QY 241 TGTCCGTTGACCGCGGCTCAACCCGTTCCGTTTCATCGAGACGCTTTACCGGAAGGTCT 300
Db |||
241 TGTCCGTTGACCGCGGCTCAACCCGTTCCGTTTCATCGAGACGCTTTACCGGAAGGTCT 300
QY 301 CGGACGGAGTTGTACCCAGACATCCACTACCTGACGGCCGACGAAGAGACCGCCACG 360
Db |||
301 CGGACGGAGTTGTACCCAGACATCCACTACCTGACGGCCGACGAAGAGACCGCCACG 360
QY 361 TGGTGGCGCAGGCCAACTCGCCGCTGGACGCCAACCGCGCTTCAACGAGGAGAAGATCC 420
Db |||
361 TGGTGGCGCAGGCCAACTCGCCGCTGGACGCCAACCGCGCTTCAACGAGGAGAAGATCC 420
QY 421 TGGTTCCGCCCAAGGGCGGAGTGGAGTTGTTGTCGGCAGCCAGGTGCACTACATGG 480
Db |||
421 TGGTTCCGCCCAAGGGCGGAGTGGAGTTGTTGTCGGCAGCCAGGTGCACTACATGG 480
QY 481 ATGTTCCGCCCGCCAGATGTTGTTGTCGGTCGGACCGCCATCATCCGTTCTCGAGCACG 540
Db |||
481 ATGTTCCGCCCGCCAGATGTTGTTGTCGGTCGGACCGCCATCATCCGTTCTCGAGCACG 540
QY 541 ACGACGCCAAACCGTCCCTCATGGTGCACATGTCAGCGCAGCGGTTCCGCTGGTGC 600
Db |||
541 ACGACGCCAAACCGTCCCTCATGGTGCACATGTCAGCGCAGCGGTTCCGCTGGTGC 600
QY 601 GTAGCGAGGCTCCGCTGTCGTTACC 626
Db |||
601 GTAGCGAGGCTCCGCTGTCGTTACC 626
```

RESULT 3

```
US-09-285-306-45
; Sequence 45, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 45
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-45
```

```
Query Match 99.2%; Score 621.2; DB 9; Length 626;
Best Local Similarity 99.5%; Pred. No. 3.7e-150;
Matches 623; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTGGCGCGCATCAAGGAGTTCTTCGGAACACGACGAGTGTGCGAGTTCA 60
Db 1 TCCGTCCTCGTGGCGCGCATCAAGGAGTTCTTCGGAACACGACGAGTGTGCGAGTTCA 60
QY 61 TGGACCAAGAACCCCGCTGTGCGGCCCTGAACCAAGCGTGTGTGTCGGCGCTGGGCC 120
Db 61 TGGACCAAGAACCCCGCTGTGCGGCCCTGAACCAAGCGTGTGTGTCGGCGCTGGGCC 120
```

```
QY 121 CCGGTGGTCTGACCCGCTGACCCGCGCGGCTCGAGGTCCGCGACGTGCACCCCTCGCACT 180
Db 121 CCGGTGGTCTGACCCGCTGACCCGCGCGGCTCGAGGTCCGCGACGTGCACCCCTCGCACT 180
QY 181 ACGGCGCGCATGTGCCGATCGAGACCCCGGAAGGCCCGAAATCATCGGCTGTGATCGGCTCGC 240
Db 181 ACGGCGCGCATGTGCCGATCGAGACCCCGGAAGGCCCGAAATCATCGGCTGTGATCGGCTCGC 240
QY 241 TGTCCGTGTACCGCGCGGTCACCCGCTTCCGTTTCATCGAGACGCTTACCGGAAGGTCT 300
Db 241 TGTCCGTGTACCGCGCGGTCACCCGCTTCCGTTTCATCGAGACGCTTACCGGAAGGTCT 300
QY 301 CGGACGGAGTGTCTACCGACGATCCACTACCTGACCGCGCGACCGAAGAGGACCCCGACG 360
Db 301 CGGACGGAGTGTCTACCGACGATCCACTACCTGACCGCGCGACCGAAGAGGACCCCGACG 360
QY 361 TGGTGGCGCAGGCCAACTCGCCCGTGGACGCCAACAGCGCGCTTCAACGAGGAGAGATCC 420
Db 361 TGGTGGCGCAGGCCAACTCGCCCGTGGACGCCAACAGCGCGCTTCAACGAGGAGAGATCC 420
QY 421 TGGTTCGCCGCAAGGCGCGAGGTGGAGTTCGTCGCGACCGCATGATCCGTTCCCTCGAGCAG 480
Db 421 TGGTTCGCCGCGCAGATGGTTCGTCGCGACCGCATGATCCGTTCCCTCGAGCAG 480
QY 481 ATGTCTCGCGCGCAGATGGTTCGTCGCGACCGCATGATCCGTTCCCTCGAGCAG 540
Db 481 ATGTCTCGCGCGCAGATGGTTCGTCGCGACCGCATGATCCGTTCCCTCGAGCAG 540
QY 541 ACGACGCCAACCGTCCCTCATGGTGCCAAATGACGCGCGCAGCGGTTCCGCTGGTG 600
Db 541 ACGACGCCAACCGTCCCTCATGGTGCCAAATGACGCGCGCAGCGGTTCCGCTGGTG 600
QY 601 GTAGCGAGGCTCCGCTGGTTCGGTACC 626
Db 601 GTAGCGAGGCTCCGCTGGTTCGGTACC 626
```

RESULT 4

```
US-09-285-306-46
; Sequence 46, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 46
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-46
```

```
Query Match 99.2%; Score 621.2; DB 9; Length 626;
Best Local Similarity 99.5%; Pred. No. 3.7e-150;
Matches 623; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1 TCCGTCCTCCGTCGTGGCGCGATCAAGAGTTCCTTCGGAACCAAGCAGCTGTGCGAGTTCA 60
Db 1 TCCGTCCTCCGTCGTGGCGCGATCAAGAGTTCCTTCGGAACCAAGCAGCTGTGCGAGTTCA 60
QY 61 TGGACAGAAACACCGCTGTGCGGCTTGACCCCAAGCGTCTGTGCGGCGCTGGGCC 120
Db 61 TGGACAGAAACACCGCTGTGCGGCTTGACCCCAAGCGTCTGTGCGGCGCTGGGCC 120
QY 121 CCGGTGGTCTGACCCGCTGACCCGCGCGGCTCGAGGTCCGCGACGTGCACCCCTCGCACT 180
Db 121 CCGGTGGTCTGACCCGCTGACCCGCGCGGCTCGAGGTCCGCGACGTGCACCCCTCGCACT 180
```

```
Db 121 CCGGTGGTCTGACCCGCTGACCCGCGCGGCTCGAGGTCCGCGACGTGCACCCCTCGCACT 180
QY 181 ACGGCGCGCATGTGCCGATCGAGACCCCGGAAGGCCCGAAATCATCGGCTGTGATCGGCTCGC 240
Db 181 ACGGCGCGCATGTGCCGATCGAGACCCCGGAAGGCCCGAAATCATCGGCTGTGATCGGCTCGC 240
QY 241 TGTCCGTGTACCGCGCGGTCACCCGCTTCCGTTTCATCGAGACGCTTACCGGAAGGTCT 300
Db 241 TGTCCGTGTACCGCGCGGTCACCCGCTTCCGTTTCATCGAGACGCTTACCGGAAGGTCT 300
QY 301 CGGACGGAGTGTCTACCGACGATCCACTACCTGACCGCGCGACCGAAGAGGACCCCGACG 360
Db 301 CGGACGGAGTGTCTACCGACGATCCACTACCTGACCGCGCGACCGAAGAGGACCCCGACG 360
QY 361 TGGTGGCGCAGGCCAACTCGCCCGTGGACGCCAACAGCGCGCTTCAACGAGGAGAGATCC 420
Db 361 TGGTGGCGCAGGCCAACTCGCCCGTGGACGCCAACAGCGCGCTTCAACGAGGAGAGATCC 420
QY 421 TGGTTCGCCGCAAGGCGCGAGGTGGAGTTCGTCGCGACCGCATGATCCGTTCCCTCGAGCAG 480
Db 421 TGGTTCGCCGCGCAGATGGTTCGTCGCGACCGCATGATCCGTTCCCTCGAGCAG 480
QY 481 ATGTCTCGCGCGCAGATGGTTCGTCGCGACCGCATGATCCGTTCCCTCGAGCAG 540
Db 481 ATGTCTCGCGCGCAGATGGTTCGTCGCGACCGCATGATCCGTTCCCTCGAGCAG 540
QY 541 ACGACGCCAACCGTCCCTCATGGTGCCAAATGACGCGCGCAGCGGTTCCGCTGGTG 600
Db 541 ACGACGCCAACCGTCCCTCATGGTGCCAAATGACGCGCGCAGCGGTTCCGCTGGTG 600
QY 601 GTAGCGAGGCTCCGCTGGTTCGGTACC 626
Db 601 GTAGCGAGGCTCCGCTGGTTCGGTACC 626
```

RESULT 5

```
US-09-285-306-39
; Sequence 39, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 39
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-39
```

```
Query Match 93.1%; Score 582.8; DB 9; Length 626;
Best Local Similarity 95.7%; Pred. No. 2.7e-140;
Matches 599; Conservative 0; Mismatches 27; Indels 0; Gaps 0;
QY 1 TCCGTCCTCCGTCGTGGCGCGATCAAGAGTTCCTTCGGAACCAAGCAGCTGTGCGAGTTCA 60
Db 1 TCCGTCCTCCGTCGTGGCGCGATCAAGAGTTCCTTCGGAACCAAGCAGCTGTGCGAGTTCA 60
QY 61 TGGACAGAAACACCGCTGTGCGGCTTGACCCCAAGCGTCTGTGCGGCGCTGGGCC 120
Db 61 TGGACAGAAACACCGCTGTGCGGCTTGACCCCAAGCGTCTGTGCGGCGCTGGGCC 120
QY 121 CCGGTGGTCTGACCCGCTGACCCGCGCGGCTCGAGGTCCGCGACGTGCACCCCTCGCACT 180
Db 121 CCGGTGGTCTGACCCGCTGACCCGCGCGGCTTGAGGTCCGCGACGTGCACCCCTCGCACT 180
```

```
QY 181 ACGGCCGATGTGCCCCGATCGAGACCCCGGAAGGCCCGAAACATCGGCTGTGATCGGCTCGC 240
Db 181 ACGGCCGATGTGCCCCGATCGAGACCCCGGAAGGCCCGAAACATCGGCTGTGATCGGCTCGC 240
QY 241 TGTCCGTTACCGCGGGGTCAACCCGTTCCGTTTCATCGAGACGCTTACCGGAAGGTCT 300
Db 241 TGTCCGTTACCGCGGGGTCAACCCGTTCCGTTTCATCGAGACGCTTACCGGAAGGTGT 300
QY 301 CGGACGAGTTGTACCGACGACATCTACCTGACGGCCGACGAAGAGGACCGCCACG 360
Db 301 CGGAGGTTGTGTACCGACGACATCTACCTGACGGCCGACGAAGAGGACCGCCACG 360
QY 361 TGGTGGCGACGCGCAACTCGCCGTTGAGCGCAACCGCGGTTTACCGAGGAGAATGCC 420
Db 361 TCGTGGCACAGCGCAACTCGCTGTGAGCGCGGACCGGCGGTTTACCGAGGACAATGCC 420
QY 421 TGGTTCGCGCGCAAGGGCGGAGGTGGAGTTTGTGTTCGGCGACCGAGTGCACATACATGG 480
Db 421 TGGTTCGCGCGCAAGGGGTGGAGTTCGAGTTTCGTTCTCGGCGACCGAGGTGCACATACATGG 480
QY 481 ATGTCTCGCCGCGCCAGATGTGTTCGGTTCGGACCGCCATGATCCCGTTCTCGAGCACG 540
Db 481 ACGTCTCGCCGCGCCAGATGTGTTCGGTTCGGACCGCCATGATCCCGTTCTCGAGCACG 540
QY 541 ACGACGCCAAACCGTGCCCTCATATGGTGCACATGCAAGCGGCGGTTCCGCTGGTGC 600
Db 541 ACGACGCCAAACCGTGCCCTCATATGGTGCACATGCAAGCGGCGGTTCCGCTGGTGC 600
QY 601 GTAGGAGGCTCCGCTGCTGGTACC 626
Db 601 GCAGCGAGGCCCGCTGCTGGTACC 646
```

RESULT 6

US-09-285-306-30

; Sequence 30, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285.306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080.616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 30

; LENGTH: 652

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-30

```
Query Match 92.8%; Score 581.2; DB 9; Length 652;
Best Local Similarity 95.5%; Pred. No. 7e-140;
Matches 598; Conservative 0; Mismatches 28; Indels 0; Gaps 0;

QY 1 TCCGTCCCGTGTGGCGCGATCAAGGAGTTCTTCGGAAACGACGAGTGTGCGAGTTCA 60
Db 19 TCCGTCCCGTGTGGCGCGATCAAGGAGTTCTTCGGAAACGACGAGTGTGCGAGTTCA 78
QY 61 TGGACCAAGAACAAACCCGCTGTGGGCGCTGACCCACCAAGCGTGTGTGCGCGCTGGGCC 120
Db 79 TGGACCAAGAACAAACCCGCTGTGGGCTGTGAGGCTGTGACCCCAAGCGTGTGTGCGCGCTGGGCC 138
QY 121 CCGTGGTGTGACCCGCTGACCGCGCGGCTTCGAGGTTCGGAGTGCAGCGTGCACCCCTCGCACT 180
Db 139 CCGTGGTGTGACTCGTGACCGCGCGGCTTCGAGGTTCGGAGTGCAGCGTGCACCCCTCGCACT 198
QY 181 ACGGCCGATGTGCCCCGATCGAGACCCCGGAAGGCCCGAAACATCGGCTGTGATCGGCTCGC 240
```

```
Db 199 ACGGCCGATGTGCCCCGATCGAGACCCCGGAAGGCCCGAAACATCGGCTGTGATCGGTTCCG 258
QY 241 TGTCCGTTACCGCGGGGTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAAGGTCT 300
Db 259 TGTCCGTTACCGCGGGGTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAAGGTGT 318
QY 301 CGGACGAGTTGTACCGACGACATCTACCTGACGGCCGACGAAGAGGACCGCCACG 360
Db 319 CCGAGGTTGTGTACCGACGAGATCTACCTGACCGCCGACGAAGAGGACCGCCACG 378
QY 361 TGGTGGCGACGCGCAACTCGCCGTTGAGCGCAACCGCGGTTTACCGAGGAGAATGCC 420
Db 379 TGGTGGCGACGCGCAACTCGCTGTGATGTCGACGCGGCGGTTTACCGAGGACAAGATCC 438
QY 421 TGGTTCGCGCGCAAGGGCGGAGGTGGAGTTTGTGTTCGGCGACCGAGTGCACATACATGG 480
Db 439 TGGTTCGCGCGTAAGGGTGGAGTTCGAGTTTCGTTCTCGGCGACCGAGGTGCATACATGG 498
QY 481 ATGTCTCGCCGCGCCAGATGTGTTCGGTTCGGACCGCCATGATCCCGTTCTCGAGCACG 540
Db 499 ACGTCTCGCCGCGCCAGATGTGTTCGGTTCGGACCGCCATGATCCCGTTCTCGAGCACG 558
QY 541 ACGACGCCAAACCGTGCCCTCATATGGTGCACATGCAAGCGGCGGTTCCGCTGGTGC 600
Db 559 ACGACGCCAAACCGTGCCCTCATATGGTGCACATGCAAGCGGCGGTTCCGCTGGTGC 618
QY 601 GTAGCGAGGCTCCGCTGCTGGTACC 626
Db 619 GCAGCGAGGCCCGCTGCTGGTACC 644
```

RESULT 7

US-09-285-306-40

; Sequence 40, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285.306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080.616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 40

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-40

```
Query Match 92.6%; Score 579.6; DB 9; Length 626;
Best Local Similarity 95.4%; Pred. No. 1.8e-139;
Matches 597; Conservative 0; Mismatches 29; Indels 0; Gaps 0;

QY 1 TCCGTCCCGTGTGGCGCGATCAAGGAGTTCTTCGGAAACGACGAGTGTGCGAGTTCA 60
Db 1 TCCGTCCCGTGTGGCGCGATCAAGGAGTTCTTCGGAAACGACGAGTGTGCGAGTTCA 60
QY 61 TGGACCAAGAACAAACCCGCTGTGGGCGCTGACCCCAAGACGTCGTCTGTGCGCGCTGGGCC 120
Db 61 TGGACCAAGAACAAACCCGCTGTGGGCTGTGACCCCAAGACGTCGTCTTTCGCGCTGGGCC 120
QY 121 CCGTGGTGTGACCCGCTGACCGCGCGGCTTCGAGGTTCGGAGTGCAGCGTGCACCCCTCGCACT 180
Db 121 CCGTGGTGTGACCCGCTGACCGCGCGGCTTCGAGGTTCGCGAGTGCACCCCTCGCACT 180
QY 181 ACGGCCGATGTGCCCCGATCGAGACCCCGGAAGGCCCGAAACATCGGCTGTGATCGGCTCGC 240
Db 181 ACGGCCGATGTGCCCCGATCGAGACCCCGGAAGGCCCGAAACATCGGCTGTGATCGGTTCCG 240
```

```
QY 241 TGTGGGTGTACGCGGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGTCT 300
Db 241 TGTGGGTGTACGCGGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGTCT 300
QY 301 CGGACGGAGTTGTCAACCGACGATCCACTACTGACGGCCGACGAAGAGGACCGCCACG 360
Db 301 CGGACGGAGTTGTCAACCGACGATCCACTACTGACGGCCGACGAAGAGGACCGCCACG 360
QY 361 TGGTGGCGGAGCCAACTCGCCGCTGGAGCCCAACGGCCGCTTCAACCGAGGAAGATCC 420
Db 361 TGGTGGCGGAGCCAACTCGCCGCTGGAGCCCAACGGCCGCTTCAACCGAGGAAGATCC 420
QY 421 TGGTTTCGGCGCAAGGCGCGGAGGTGGAGTTCGTTCGCGACCGAGGTTCGACTACATGG 480
Db 421 TGGTTTCGGCGCAAGGCGCGGAGGTGGAGTTCGTTCGCGACCGAGGTTCGACTACATGG 480
QY 481 ATGTCTCGCGCGCCAGATGGTGTGTCGCGACCGCCATGATCCGTTCTTCGAGCACG 540
Db 481 ATGTCTCGCGCGCCAGATGGTGTGTCGCGACCGCCATGATCCGTTCTTCGAGCACG 540
QY 541 ACGAGCCCAACCGTCCCTCATGGGTGCCAAATGCGGCGCAGCGGTTCCGCTGGTGC 600
Db 541 ACGAGCCCAACCGTCCCTCATGGGTGCCAAATGCGGCGCAGCGGTTCCGCTGGTGC 600
QY 601 GTAGCGAGGCTCCGCTGGTTCGCTACC 626
Db 601 GTAGCGAGGCTCCGCTGGTTCGCTACC 626
```

RESULT 8

```
US-09-285-306-33
; Sequence 33, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 33
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-33
```

```
Query Match 92.3%; Score 578; DB 9; Length 626;
Best Local Similarity 95.2%; Pred. No. 4.6e-139;
Matches 596; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

QY 1 TCCGTCCTGTCGTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCAGCTGTGCGAGTTCA 60
Db 1 TCCGTCCTGTCGTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCAGCTGTGCGAGTTCA 60
QY 61 TGGACCAAGAACACCGCTGTCGGCGCTGACCCCAAGCGTCTGTGCGGCGCTGGGCC 120
Db 61 TGGACCAAGAACACCGCTGTCGGCGCTGACCCCAAGCGTCTGTGCGGCGCTGGGCC 120
QY 121 CCGGTGGTCTGACCCGCTGACCGCGCGCTCGAGGTCCGCGACGTGCAACCCCTCGCACT 180
Db 121 CCGGTGGTCTGACCCGCTGACCGCGCGCTCGAGGTCCGCGACGTGCAACCCCTCGCACT 180
QY 181 ACGGCGCATGTGCCCGATCGAGACCCCGAAGGCCGGAACATCGGCTGTGATCGGCTGCG 240
Db 181 ACGGCGCATGTGCCCGATCGAGACCCCGAAGGCCGGAACATCGGCTGTGATCGGCTGCG 240
QY 241 TGTGGGTGTACGCGGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGTCT 300
```

```
Db 241 TGTGGGTGTACGCGGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGTGT 300
QY 301 CGGACGGAGTTGTCAACCGACGATCCACTACTGACGGCCGACGAAGAGGACCGCCACG 360
Db 301 CGGACGGAGTTGTCAACCGACGATCCACTACTGACGGCCGACGAAGAGGACCGCCACG 360
QY 361 TGGTGGCGGAGCCAACTCGCCGCTGGAGCCCAACGGCCGCTTCAACCGAGGAAGATCC 420
Db 361 TGGTGGCGGAGCCAACTCGCCGCTGGAGCCCAACGGCCGCTTCAACCGAGGAAGATCC 420
QY 421 TGGTTTCGGCGCAAGGCGCGGAGGTGGAGTTCGTTCGCGACCGAGGTTCGACTACATGG 480
Db 421 TGGTTTCGGCGCAAGGCGCGGAGGTGGAGTTCGTTCGCGACCGAGGTTCGACTACATGG 480
QY 481 ATGTCTCGCGCGCCAGATGGTGTGTCGCGACCGCCATGATCCGTTCTTCGAGCACG 540
Db 481 ATGTCTCGCGCGCCAGATGGTGTGTCGCGACCGCCATGATCCGTTCTTCGAGCACG 540
QY 541 ACGAGCCCAACCGTCCCTCATGGGTGCCAAATGCGGCGCAGCGGTTCCGCTGGTGC 600
Db 541 ACGAGCCCAACCGTCCCTCATGGGTGCCAAATGCGGCGCAGCGGTTCCGCTGGTGC 600
QY 601 GTAGCGAGGCTCCGCTGGTTCGCTACC 626
Db 601 GTAGCGAGGCTCCGCTGGTTCGCTACC 626
```

RESULT 9

```
US-09-285-306-38
; Sequence 38, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 38
; LENGTH: 652
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-38
```

```
Query Match 92.3%; Score 578; DB 9; Length 652;
Best Local Similarity 95.2%; Pred. No. 4.6e-139;
Matches 596; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

QY 1 TCCGTCCTGTCGTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCAGCTGTGCGAGTTCA 60
Db 1 TCCGTCCTGTCGTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCAGCTGTGCGAGTTCA 77
QY 61 TGGACCAAGAACACCGCTGTCGGCGCTGACCCCAAGCGTCTGTGCGGCGCTGGGCC 120
Db 61 TGGACCAAGAACACCGCTGTCGGCGCTGACCCCAAGCGTCTGTGCGGCGCTGGGCC 137
QY 121 CCGGTGGTCTGACCCGCTGACCGCGCGCTCGAGGTCCGCGACGTGCAACCCCTCGCACT 180
Db 121 CCGGTGGTCTGACCCGCTGACCGCGCGCTCGAGGTCCGCGACGTGCAACCCCTCGCACT 197
QY 181 ACGGCGCATGTGCCCGATCGAGACCCCGAAGGCCGGAACATCGGCTGTGATCGGTTGCG 240
Db 181 ACGGCGCATGTGCCCGATCGAGACCCCGAAGGCCGGAACATCGGCTGTGATCGGTTGCG 257
QY 241 TGTGGGTGTACGCGGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGTCT 300
Db 258 TGTGGGTGTACGCGGGGTCAACCGTTTCGGTTTCATCGAGACGCTTACCGGAAGTGT 317
```

Qy 301 CGGACGAGTTGTTCACCGACGACATCCACTACCTGACCGGCCGACGAGAGACCGCCACG 360
Db |||||
Qy 318 CCGAGGTTGTGTTCACCGACGAGATCCACTACCTGACCGCCGACGAGAGACCGCCACG 377
Db |||||
Qy 361 TGGTGGCCAGGCCAACTCGCCGTGGAGGCCAACCGCCGCTTACCCGAGAGAGATCC 420
Db |||||
Qy 378 TCGTGGCACAGGCCAACTCGCCTGTGGATGCGACCGCCGCTTACCCGAGAGACGATCC 437
Db |||||
Qy 421 TGGTTCGCCGCAAGGGCGCGAGGTGGAGTTCTGTGTCGGCGACCGAGGTCCGACTACATGG 480
Db |||||
Qy 438 TGGTTCGCCGCTAAGGTTGCGAGGTGCGAGTTCGTCGCGACCGAGGTGACTACATGG 497
Db |||||
Qy 481 ATGTCTCGCCCGCCAGATGGTGTGCGTCGCGACCGCCATGATCCCGTTCTCGAGCACG 540
Db |||||
Qy 498 ACGTCTCGCCCGCCAAATGGTGTGCGTCGCGACCGCCATGATCCCGTTCTCGAGCACG 557
Db |||||
Qy 541 ACGAGCCCAACGTCCTCATGGTGCACATGCGAGCGCCAGGCGTTCCGCTGGTGC 600
Db |||||
Qy 558 ACGAGCCCAACGTCCTCATGGTGCACATGCGAGCGCCAGGCGTTCCGCTGGTGC 617
Db |||||
Qy 601 GTAGCGAGGCTCCGCTGGTCCGTACC 626
Db |||||
Qy 618 CGAGCGAGGCCCGCTGGTCCGTACC 643
Db |||||

RESULT 10

US-09-285-306-31

; Sequence 31, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285.306A

; EARLIER FILING DATE: 1999-04-02

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSEQ for Windows Version 3.0

; SEQ ID NO 31

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-31

Query Match 91.8%; Score 574.8; DB 9; Length 626;

Best Local Similarity 94.9%; Pred. No. 3.1e-138;

Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

Qy 1 TCCGTCCCGTCTGGCGCGATCAAGGAGTTCTTCGGAACCGACGAGTTCGCGATTCA 60
Db |||||
Qy 1 TCCGTCCCGTCTGGCGCGATCAAGGAGTTCTTCGGAACCGACGAGTTCGCGATTCA 60
Db |||||
Qy 61 TGGACCAAGAACAAACCCGCTTCGCGCTTGACCCCAAGCGTCTGTGCGCGCTGGGCC 120
Db |||||
Qy 121 CCGTGTGTTGACCCGTCACCGCGCGCTTCGAGTTCGCGAGTCCGCGACCGTCCGCACT 180
Db |||||
Qy 121 CCGTGTGTTGACCCGTCACCGCGCGCTTCGAGTTCGCGAGTCCGCGACCGTCCGCACT 180
Db |||||
Qy 181 ACGCGCGATGTGCCCGATCGAGACCCCGGAAGGCCGGAACATCGGCTGATCGCTCGC 240
Db |||||
Qy 181 ACGCGCGATGTGCCCGATCGAGACCCCGGAAGGCCGGAACATCGGCTGATCGCTCGC 240
Db |||||
Qy 241 TGTCCGTGTACCGCGGTCGAACCGGTTCCGTTTTCATCGAGACGCTTTACCGGAAGGTCT 300
Db |||||
Qy 241 TTTCCGTGTACCGCGGTCGAACCGGTTCCGTTTTCATCGAGACGCTTTACCGGAAGGTCT 300
Db |||||
Qy 301 CGGACGAGTTGTTCACCGACGACATCCACTACCTGACCGGCCGACGAGAGACCGCCACG 360
Db |||||

Db 301 CCGAGGTTGTCTCACCGACGAGATCCACTACCTGACCGGCCGACGAGAGACCGCCACG 360
Qy |||||
Qy 361 TGGTGGCGAGCCAACTCGCCCGTGGACGCAACCGCCGCTTCCACCGAGAGAGATCC 420
Db |||||
Qy 361 TCGTGGCACAGGCCAACTCGCCTGTGGATGCGGACGCGCGCTTCCACCGAGAGAGATCC 420
Db |||||
Qy 421 TGGTTCGCCGCAAGGGCGCGAGGTGGAGTTCTGTGTCGGCGACCGAGGTCCGACTACATGG 480
Db |||||
Qy 421 TGGTTCGCCGCTAAGGTTGCGAGGTTCGAGTTCGTCGCGACCGAGGTTCGCTGGTTCG 480
Db |||||
Qy 481 ATGTCTCGCCCGCCAGATGGTGTGCGTCGCGACCGCCATGATCCCGTTCTCGAGCACG 540
Db |||||
Qy 481 ACGTCTCGCCCGCCAGATGGTGTGCGTCGCGACCGCCATGATCCCGTTCTCGAGCACG 540
Db |||||
Qy 541 ACGAGCCCAACCGTCCTCATGGTGCACATGCGAGCGCCAGGCGTTCCGCTGGTGC 600
Db |||||
Qy 541 ACGAGCCCAACCGTCCTCATGGTGCACATGCGAGCGCCAGGCGTTCCGCTGGTGC 600
Db |||||
Qy 601 GTAGCGAGGCTCCGCTGGTCCGTACC 626
Db |||||
Qy 601 CGAGCGAGGCCCGCTGGTCCGTACC 626
Db |||||

RESULT 11

US-09-285-306-36

; Sequence 36, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285.306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSEQ for Windows Version 3.0

; SEQ ID NO 36

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-36

Query Match 91.8%; Score 574.8; DB 9; Length 626;

Best Local Similarity 94.9%; Pred. No. 3.1e-138;

Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

Qy 1 TCCGTCCCGTCTGGCGCGATCAAGGAGTTCTTCGGAACCGACGAGTTCGCGATTCA 60
Db |||||
Qy 1 TCCGTCCCGTCTGGCGCGATCAAGGAGTTCTTCGGAACCGACGAGTTCGCGATTCA 60
Db |||||
Qy 61 TGGACCAAGAACAAACCCGCTTCGCGCTTGACCCCAAGCGTCTGTGCGCGCTGGGCC 120
Db |||||
Qy 61 TGGACCAAGAACAAACCCGCTTCGCGCTTGACCCCAAGCGTCTGTGCGCTTCGGGCC 120
Db |||||
Qy 121 CCGTGTGTTGACCCGTCACCGCGCGCTTCGAGTTCGCGAGTCCGCGACCGTCCGCACT 180
Db |||||
Qy 121 CCGTGTGTTGACCCGTCACCGCGCGCTTCGAGTTCGCGAGTCCGCGACCGTCCGCACT 180
Db |||||
Qy 181 ACGCGCGATGTGCCCGATCGAGACCCCGGAAGGCCGGAACATCGGCTGATCGGCTGCG 240
Db |||||
Qy 181 ACGCGCGATGTGCCCGATCGAGACCCCGGAAGGCCGGAACATCGGCTGATCGGCTGCG 240
Db |||||
Qy 241 TGTCCGTGTACCGCGGTCGAACCGGTTCCGTTTTCATCGAGACGCTTTACCGGAAGGTCT 300
Db |||||
Qy 241 TTTCCGTGTACCGCGGTCGAACCGGTTCCGTTTTCATCGAGACGCTTTACCGGAAGGTCT 300
Db |||||
Qy 301 CGGACGAGTTGTTCACCGACGACATCCACTACCTGACCGGCCGACGAGAGACCGCCACG 360
Db |||||
Qy 301 CCGAGGTTGTCTCACCGACGAGATCCACTACCTGACCGGCCGACGAGAGACCGCCACG 360
Db |||||

QY 361 TGGTGGCAGGCGCAACTCGCTGGATGCGGCGGCTTCCACGAGGACAAGATCC 420
Db |||||
QY 361 TGGTGGCAGGCGCAACTCGCTGGATGCGGCGGCTTCCACGAGGACAAGATCC 420
Db |||||
QY 421 TGGTTCGCGCGCAAGGCGGAGGTGGAGTTCGTTCGCGGACCGAGGTGCACTACATGG 480
Db |||||
QY 421 TGGTTCGCGCGTAAGGCGGAGGTGCGAGTTCGTTCGCGGACCGAGGTGCACTACATGG 480
Db |||||
QY 481 ATGTCTCGCGCGCCAGATGGTTCGCGGACCGCCATGATCCGCTTCGAGACAG 540
Db |||||
QY 481 ACGTCTCGCGCGCCAGATGGTTCGCGGACCGCCATGATCCGCTTCGAGACAG 540
Db |||||
QY 541 ACAGCGCCAAACCGTCCCTCATGGGTGCCAATGTCAGCGCCAGGCGGTTCGCTGGTGC 600
Db |||||
QY 541 ACAGCGCCAAACCGTCCCTCATGGGTGCCAATGTCAGCGCCAGGCGGTTCGCTGGTGC 600
Db |||||
QY 601 GTAGCGAGGCTCCGCTGGTTCGGTACC 626
Db |||||
QY 601 GCAGCGAGGCGCGCTGGTTCGGTACC 626
Db |||||

RESULT 12

US-09-285-306-37

; Sequence 37, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 37

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-37

Query Match 91.8%; Score 574.8; DB 9; Length 626;

Best Local Similarity 94.9%; Pred. No. 3.1e-138;

Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTGGCGGCGATCAAGGAGTTCCTCGGAACCAAGCGTCTGTGCGGCGCTGGGCC 60
Db |||||
QY 1 TCCGTCCTCGTGGCGGCGATCAAGGAGTTCCTCGGAACCAAGCGTCTGTGCGGCTGGGCC 60
Db |||||
QY 61 TGGACCAAGAAACCCCGCTGTGCGGCGCTGACCCCAAGCGTCTGTGCGGCGCTGGGCC 120
Db |||||
QY 61 TGGACCAAGAAACCCCGCTGTGCGGCTGTGACCCCAAGCGTCTGTGCGGCTGGGCC 120
Db |||||
QY 121 CCGGTGGTGTGACCGGTGACCGGCGGCGCTCGAGGTTCGCGAAGCGTGCACCTCGCACT 180
Db |||||
QY 121 CCGGTGGTGTGACCGGTGACCGGCGGCGCTTTGAGTTCGCGACGTGCAACCCCTCGCACT 180
Db |||||
QY 181 ACGGCGCGATGTGCCGATCGAGACCCCGGAAGGCCGGAACATCGSCCTGATCGGCTCGC 240
Db |||||
QY 181 ACGGCGCGATGTGCCGATCGAGACCCCGGAAGGCCGGAACATCGSCCTGATCGGCTCGC 240
Db |||||
QY 241 TGTGGTGTGACCGGCGGTCAACCCGTTTCGCTTCATCGAGACGCTTTACCGGAAGGTCT 300
Db |||||
QY 241 TTTGGTGTGACCGGCGGTCAACCCGTTTCGCTTCATCGAGACGCGTACCGCAAGGTGT 300
Db |||||
QY 301 CGGACGAGTGTGTACCGGAGATCACTACTGAGCGGCGGACGAGGACCGCCACG 360
Db |||||
QY 301 CCGAGGGTGTGTGTCACCGAGAGATCCACTACTGACCGCCGACGAGGACCGCCACG 360
Db |||||
QY 361 TGGTGGCAGGCGCAACTCGCTGGATGCGGCGGCTTCCACGAGGACAAGATCC 420
Db |||||

Db 361 TCGTGGCAGGCGCAACTCGCTGGATGCGGCGGCTTCCACGAGGACAAGATCC 420
QY 421 TGGTTCGCGCGCAAGGCGGAGGTGGAGTTCGTTCGCGGACCGAGGTGCACTACATGG 480
Db |||||
QY 421 TGGTTCGCGCGTAAGGCGGAGGTTCGAGTTCGTTCGCGGACCGAGGTGCACTACATGG 480
Db |||||
QY 481 ATGTCTCGCGCGCCAGATGGTTCGCGGACCGCCATGATCCGCTTCGAGACAG 540
Db |||||
QY 481 ACGTCTCGCGCGCCAGATGGTTCGCGGACCGCCATGATCCGCTTCGAGACAG 540
Db |||||
QY 541 ACAGCGCCAAACCGTCCCTCATGGGTGCCAATGTCAGCGCCAGGCGGTTCGCTGGTGC 600
Db |||||
QY 541 ACAGCGCCAAACCGTCCCTCATGGGTGCCAATGTCAGCGCCAGGCGGTTCGCTGGTGC 600
Db |||||
QY 601 GTAGCGAGGCTCCGCTGGTTCGGTACC 626
Db |||||
QY 601 GCAGCGAGGCGCGCTGGTTCGGTACC 626
Db |||||

RESULT 13

US-09-285-306-41

; Sequence 41, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 41

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-41

Query Match 91.8%; Score 574.8; DB 9; Length 626;

Best Local Similarity 94.9%; Pred. No. 3.1e-138;

Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGTGGCGGCGATCAAGGAGTTCCTTCGGAACCAAGCGTCTGTGCGGCGCTGGGCC 60
Db |||||
QY 1 TCCGTCCTCGTGGCGGCGATCAAGGAGTTCCTTCGGAACCAAGCGTCTGTGCGGCTGGGCC 60
Db |||||
QY 61 TGGACCAAGAAACCCCGCTGTGCGGCGCTGACCCCAAGCGTCTGTGCGGCGCTGGGCC 120
Db |||||
QY 61 TGGACCAAGAAACCCCGCTTTTGGGTCTGACCCCAAGCGTCTGTGCGGCTGGGCC 120
Db |||||
QY 121 CCGGTGGTGTGACCGGTGACCGGCGGCGCTCGAGGTTCGCGAAGCGTGCACCCCTCGCACT 180
Db |||||
QY 121 CCGGTGGTGTGACCGGTGACCGGCGGCGCTTGAGGTTCGCGACGTGCAACCCCTCGCACT 180
Db |||||
QY 181 ACGGCGCGATGTGCCGATCGAGACCCCGGAAGGCCGGAACATCGSCCTGATCGGCTCGC 240
Db |||||
QY 181 ACGGCGCGATGTGCCGATCGAGACCCCGGAAGGCCGGAACATCGSCCTGATCGGCTCGC 240
Db |||||
QY 241 TGTGGTGTGACCGGCGGTCAACCCGTTTCGCTTCATCGAGACGCTTTACCGGAAGGTCT 300
Db |||||
QY 241 TTTGGTGTGACCGGCGGTCAACCCGTTTCGCTTCATCGAGACGCGTACCGCAAGGTGT 300
Db |||||
QY 301 CGGACGAGTGTGTACCGGAGATCACTACTGAGCGGCGGACGAGGACCGCCACG 360
Db |||||
QY 301 CCGAGGGTGTGTGTCACCGAGAGATCCACTACTGACCGCCGACGAGGACCGCCACG 360
Db |||||
QY 361 TGGTGGCAGGCGCAACTCGCTGGATGCGGCGGCTTCCACGAGGACAAGATCC 420
Db |||||

QY 421 TGGTTCGCCGCAAGCGCGCGAGTGGAGTTCTGTCTCGGCGACCGAGGTGCACTACATGG 480
Db |||||
421 TGGTTCGCCGCAAGCGTGAAGGTCGCGAGTTCGAGTTCTGTCTCGGCGACCGAGGTGCACTACATGG 480
QY 481 ATGTTCTCGCGCGCCAGATGTTGTCGTGCGGACCGCATGATCCGTTCTCTCGAGCACG 540
Db |||||
481 ACGTCTCGCGCGCCAGATGTTGTCGTGCGGACCGCATGATCCGTTCTCTCGAGCACG 540
QY 541 ACGAGCCCAACCGTCCCTCATGTTGTCGCAACATGACGCGCAGCGGTTCGGTGGTGC 600
Db |||||
541 ACGAGCCCAACCGTCCCTCATGTTGTCGCAACATGACGCGCAGCGGTTCGGTGGTGC 600
QY 601 GTAGCGAGGCTCCGCTGTCGTGTTACC 626
Db |||||
601 GCAGCGAGGCGCCGCTGTCGTGTTACC 626

RESULT 14

US-09-285-306-42

; Sequence 42, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 42

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-42

Query Match 91.8%; Score 574.8; DB 9; Length 626;
Best Local Similarity 94.9%; Pred. No. 3.1e-138;
Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

QY 1 TCCGTCCCGTCTGTCGCGCGCATCAAGGAGTTCTTCGGAACACGAGCGTGTGCGAGTTCA 60
Db |||||
1 TCCGTCCCGTCTGTCGCGCGCATCAAGGAGTTCTTCGGAACACGAGCGTGTGCGAGTTCA 60
QY 61 TGGACCAAGAACAAACCCGCTGTCGGGCTGACCCACAGCGTCTGTGCGGCTTGGGCC 120
Db |||||
61 TGGACCAAGAACAAACCCGCTGTCGGGCTGACCCACAGCGTCTGTGCGGCTTGGGCC 120
QY 121 CCGGTGTTCTGACCCGTGACCGCGCGGCTCGAGGTCGCGAGCTGCACCCCTCGCACT 180
Db |||||
121 CCGGTGTTCTGACCCGTGACCGCGCGGCTCGAGGTCGCGAGCTGCACCCCTCGCACT 180
QY 181 ACGGCGCATGTGCCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGCTCGC 240
Db |||||
181 ACGGCGCATGTGCCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGTTGCG 240
QY 241 TGTGTTGATACGCGGGTCAACCCGTTTCGTTTTCATCGAGCGCTTTACCGGAAGGTCT 300
Db |||||
241 TTTCCGTGTACGCGGGTCAACCCGTTTCGTTTTCATCGAGCGCTTACCGGAAGGTGT 300
QY 301 CGGACGAGTTGTACCGAGGATCCACTACCTGACGCGCGGACGAGAGACCGCCACG 360
Db |||||
301 CCGAGGTTGTCTACCGAGGATCCACTACCTGACGCGCGGACGAGAGACCGCCACG 360
QY 361 TGGTGGCGAGGCCAACTCGCCGTGAGACGCCAACCGCGCTTACCGAGGAGAGATCC 420
Db |||||
361 TCGTGGCACAGGCCAACTCGCTGTGGATGCGAGCGCGCTTACCGAGGAGAGATCC 420
QY 421 TGGTTCGCCGCAAGCGCGCGAGTGGAGTTCTGTCTCGGCGACCGAGGTGCACTACATGG 480
|||

Db 421 TGGTTCGCCGCAAGGTTGGCGAGTTCGAGTTCTGTCTCGGCGACCGAGGTGCACTACATGG 480
QY 481 ATGTTCTCGCGCGCCAGATGTTGTCGTGCGGACCGCATGATCCGTTCTCTCGAGCACG 540
Db |||||
481 ACGTCTCGCGCGCCAGATGTTGTCGTGCGGACCGCATGATCCGTTCTCTCGAGCACG 540
QY 541 ACGAGCCCAACCGTCCCTCATGTTGTCGCAACATGACGCGCAGCGGTTCGGTGGTGC 600
Db |||||
541 ACGAGCCCAACCGTCCCTCATGTTGTCGCAACATGACGCGCAGCGGTTCGGTGGTGC 600
QY 601 GTAGCGAGGCTCCGCTGTCGTGTTACC 626
Db |||||
601 GCAGCGAGGCGCCGCTGTCGTGTTACC 626

RESULT 15

US-09-285-306-43

; Sequence 43, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 43

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-43

Query Match 91.8%; Score 574.8; DB 9; Length 626;
Best Local Similarity 94.9%; Pred. No. 3.1e-138;
Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

QY 1 TCCGTCCCGTCTGTCGCGCGCATCAAGGAGTTCTTCGGAACACGAGCGTGTGCGAGTTCA 60
Db |||||
1 TCCGTCCCGTCTGTCGCGCGCATCAAGGAGTTCTTCGGAACACGAGCGTGTGCGAGTTCA 60
QY 61 TGGACCAAGAACAAACCCGCTGTCGGGCTGACCCACAGCGTCTGTGCGGCTTGGGCC 120
Db |||||
61 TGGACCAAGAACAAACCCGCTTTCGGGCTGACCCACAGCGTCTGTGCGGCTTGGGCC 120
QY 121 CCGGTGTTCTGACCCGTGACCGCGCGGCTCGAGGTCGCGAGCTGCACCCCTCGCACT 180
Db |||||
121 CCGGTGTTCTGACCCGTGACCGCGCGGCTCGAGGTCGCGAGCTGCACCCCTCGCACT 180
QY 181 ACGGCGCATGTGCCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGCTCGC 240
Db |||||
181 ACGGCGCATGTGCCCGATCGAGACCCCGGAAGGCCGAAACATCGGCTGATCGGTTGCG 240
QY 241 TGTGTTGATACGCGGGTCAACCCGTTTCGTTTTCATCGAGCGCTTTACCGGAAGGTCT 300
Db |||||
241 TTTCCGTGTACGCGGGTCAACCCGTTTCGTTTTCATCGAGCGCTTACCGGAAGGTGT 300
QY 301 CGGACGAGTTGTACCGAGGATCCACTACCTGACGCGCGGACGAGAGACCGCCACG 360
Db |||||
301 CCGAGGTTGTCTACCGAGGATCCACTACCTGACGCGCGGACGAGAGACCGCCACG 360
QY 361 TGGTGGCGAGGCCAACTCGCCGTGAGACGCCAACCGCGCTTACCGAGGAGAGATCC 420
Db |||||
361 TCGTGGCACAGGCCAACTCGCTGTGGATGCGAGCGCGCTTACCGAGGAGAGATCC 420
QY 421 TGGTTCGCCGCAAGCGCGCGAGTGGAGTTCTGTCTCGGCGACCGAGGTGCACTACATGG 480
Db |||||
421 TGGTTCGCCGCAAGGTTGGCGAGTTCGAGTTCTGTCTCGGCGACCGAGGTGCACTACATGG 480

QY	481	ATGTTCTCGCGCCAGATGGTGGTTCGACCGCCATGATCCCGTTCTCTCGAGCACG	540
Db	481	ACGTCTCGCGCCAGATGGTGGTTCGACCGCCATGATCCCGTTCTCTCGAGCACG	540
QY	541	ACGACGCCAACCGTGCCTTCATGGGTGCCAACATGCAGCGCCAGCGGTTCCGCTGGTGC	600
Db	541	ACGACGCCAACCGTGCCTTCATGGGTGCCAACATGCAGCGCCAGCGGTTCCGCTGGTGC	600
QY	601	GTAGCGAGGCTCGCTGGTTCGGTACC	626
Db	601	GCAGCGAGGCTCGCTGGTTCGGTACC	626

Search completed: August 25, 2005, 11:35:29
Job time : 402.049 secs

This Page Blank (uspro)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds
(without alignments)
11150.034 Million cell updates/sec

Title: US-09-285-306-3
Perfect score: 705
Sequence: 1 cccaggagctggagcgatc.....ggcgatcgagcgagcgagt 705

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA: *
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq: *
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq: *
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq: *
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq: *
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq: *
6: /cgn2_6/ptodata/1/ina/backfiles1.seq: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	555	78.7	3447	2	US-08-313-185-57
5	555	78.7	3447	2	US-09-082-614A-57
6	541.4	76.8	970	1	US-08-250-030-1
7	541.4	76.8	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	3	US-08-520-946-135
11	530.4	75.2	620	3	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	3	US-08-520-946-136
19	528.8	75.0	620	3	US-08-520-946-137
20	528.8	75.0	620	3	US-08-520-946-139
21	528.8	75.0	620	3	US-08-520-946-140
22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	454.4	64.5	706	3	US-08-797-812-25
27	409	58.0	5099	4	US-09-887-052-1

28	407.4	57.8	5099	4	US-09-887-052-3	Sequence 3, Appli
29	407.4	57.8	5099	4	US-09-887-052-5	Sequence 5, Appli
30	403.2	57.2	4227	4	US-09-902-540-8919	Sequence 8919, Ap
C 31	403.2	57.2	9367	4	US-09-902-540-951	Sequence 951, App
C 32	367.6	52.1	4074	4	US-09-252-991A-4737	Sequence 4737, Ap
33	367.6	52.1	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
34	337.6	47.9	4083	4	US-09-489-039A-22	Sequence 22, Appl
C 35	337.6	47.9	4206	4	US-09-489-039A-30	Sequence 30, Appl
36	295	41.8	432	2	US-08-313-185-59	Sequence 59, Appl
37	295	41.8	432	3	US-09-082-614A-59	Sequence 59, Appl
38	284.6	40.4	324	3	US-08-750-088A-36	Sequence 36, Appl
39	284.6	40.4	324	4	US-09-722-319-36	Sequence 36, Appl
40	263.6	37.4	2964	4	US-09-540-032-1097	Sequence 1097, Ap
41	263.6	37.4	31063	4	US-09-596-002-20	Sequence 20, Appl
42	262.4	37.2	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
43	257.2	36.5	319	3	US-08-750-088A-35	Sequence 35, Appl
44	257.2	36.5	319	4	US-09-722-319-35	Sequence 35, Appl
C 45	249	35.3	11935	4	US-09-634-238-401	Sequence 401, App

ALIGNMENTS

RESULT 1
US-08-797-812-24
; Sequence 24, Application US/08797812
; Patent No. 6228575
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas A.
; APPLICANT: Mack, David
; APPLICANT: Chee, Mark S.
; APPLICANT: Berno, Anthony J.
; APPLICANT: Stryer, Lubert
; APPLICANT: Ghandour, Ghassan
; APPLICANT: Wang, Ching
; TITLE OF INVENTION: Chip-Based Species Identification and
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111

COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/797,812
; FILING DATE: 07-FEB-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/017,765
; FILING DATE: 15-MAY-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/629,031
; FILING DATE: 08-APR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/012,631
; FILING DATE: 01-MAR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/011,339
; FILING DATE: 08-FEB-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Fitts, Renee A.
; REGISTRATION NUMBER: 35,136
; REFERENCE/DOCKET NUMBER: 16528X-018550
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-326-2400
; TELEFAX: 415-326-2422

; INFORMATION FOR SEQ ID NO: 24:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 706 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: cDNA

US-08-797-812-24

Query Match 86.6%; Score 610.6; DB 3; Length 706;

Best Local Similarity 91.2%; Pred. No. 1.4e-112;

Matches 643; Conservative 3; Mismatches 59; Indels 0; Gaps 0;

```
Qy 1 CCCAGACGTGGAGCGGATCACACGCGAGACCTTGATCAACATCCGTCCCGTGGGGG 60
Db 2 CCCAGACGTGGAGCGGATCACACGCGAGAGTGTGATCAACATCCGCGCGTGGCGG 61
Qy 61 CGATCAAGGAGTTCTTCGGCCACGACGCTGTCCAGTTTCATGACACAGAACCCGC 120
Db 62 CGATCAAGGAGTTCTTCGGCCACGACGCTGTCCAGTTTCATGACACAGAACCCGC 121
Qy 121 TGTGGGGCTACCCACAAGCGCCCTGTGCGGCTGGGCGCGGTGTCTGTCCGGG 180
Db 122 TGTGGGGTTGACCCACAAGCGCGACTGTGCGGCTGGGCGCGGTGTGTCAAGTG 181
Qy 181 AGCGGGCGGGTGGAGGTCCGCGAGTGCACCGTCCACTAGCGGCGGATGTGCCGA 240
Db 182 AGCGTCCGGGTGGAGGTCCGCGAGTGCACCGTCCACTAGCGGCGGATGTGCCGA 241
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTACGCGGG 300
Db 242 TCGAAACCCCTGAGGGGCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTACGCGGG 301
Qy 301 TCAACCCGTTGCGGTTCATCGAGACCGCGTACCGCAAGGTGTGACGGCGTGTACCG 360
Db 302 TCAACCCGTTGCGGTTCATCGAAACCGCGTACCGCAAGGTGTGTGAGCG 361
Qy 361 ACGAGATCCACTACTGACCGCGGACGAGGAGGACCGCCAGTGTGTGCGCAGGCCAACT 420
Db 362 ACGAGATCGTACTGACCGCGGACGAGGAGGACCGCCAGTGTGTGCGCAGGCCAACT 421
Qy 421 CGCCGATCGACGGCAAGGGCGGGTTCGCGAGGCGCGGGTCTGTCTCCGCGCAAGCGG 480
Db 422 CGCCGATCGATCGGACGGTCTGCTGCGTGTGAGCGCGCGGTGTGTGCGCGCAAGCGG 481
Qy 481 CGGAGTCTGAGTGTGCGCTGCTCCGAGGTGGACTACATGGACNTKTCSCGCGCCARA 540
Db 482 CGGAGTGGAGTACGTGCGCTCTGCTGAGGTGGACTACATGGACNTKTCSCGCGCCARA 541
Qy 541 TGGTGTGGTGCCACCGCGATGATCCCGTTCTCTGAGCAGCAGCGCCAAACCGTGCC 600
Db 542 TGGTGTGGTGCCACCGCGATGATTCCTTCTTGGAGCAGCAGCGCCAAACCGTGCC 601
Qy 601 TGATGGGCGCAACATGCAKCGCCAGCGGTTCCGCTGGTGTGCGCAGCGAGCGCGGTGG 660
Db 602 TCATGGGGCAACATGCAKCGCCAGCGGTTCCGCTGGTGTGCGCAGCGAGCGCGGTGG 661
Qy 661 TGGGACCGGATGAGGTGTGGCGGCGATGCGAGCGCGGACGT 705
Db 662 TGGGACCGGATGAGGTGTGGCGGCGATGCGAGCGCGGACGT 706
```

RESULT 2

US-09-103-840A-2

; Sequence 2, Application US/09103840A

; Patent No. 6294328

; GENERAL INFORMATION:

; APPLICANT: FLEISCHMAN, Robert D.

; APPLICANT: WHITE, Owen R.

; APPLICANT: FRASER, Claire M.

; APPLICANT: VENTER, John C.

; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM

; TITLE OF INVENTION: TUBERCULOSIS

; FILE REFERENCE: 24366-20007.00

; CURRENT APPLICATION NUMBER: US/09/103.840A

; CURRENT FILING DATE: 1998-06-24

; NUMBER OF SEQ ID NOS: 2

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 2

; LENGTH: 4403765

; TYPE: DNA

; ORGANISM: Mycobacterium tuberculosis

; FEATURE:

; OTHER INFORMATION: CDC 1551

; OTHER INFORMATION: "n" bases at various positions throughout the sequence

; OTHER INFORMATION: represent a, t, c or g

US-09-103-840A-2

Query Match 85.5%; Score 603; DB 3; Length 4403765;

Best Local Similarity 91.0%; Pred. No. 7.8e-111;

Matches 636; Conservative 3; Mismatches 60; Indels 0; Gaps 0;

```
Qy 1 CCCAGGACGTGGAGCGGATCACACGCGAGACCTTGATCAACATCCGTCCCGTGGCGG 60
Db 762963 CCCAGGACGTGGAGCGGATCACACGCGAGAGTGTGATCAACATCCGCGCGTGGCGG 763022
Qy 61 CGATCAAGGAGTTCTTCGGCAACGACGCTGTCCAGTTTCATGGAACAGAACCCGC 120
Db 763023 CGATCAAGGAGTTCTTCGGCAACGACGCTGTCCAGTTTCATGGAACAGAACCCGC 763082
Qy 121 TGTGGGGCTACCCACAAGCGCCCTGTGCGGCTGGGCGCGGTGTCTGTCCGGG 180
Db 763083 TGTGGGGTTGACCCACAAGCGCGACTGTGCGGCTGGGCGCGGTGTGTCAAGTG 763142
Qy 181 AGCGGGCGGGTGGAGGTCCGCGAGTCCGCGACGTGCACCGTCCACTAGCGGCGGATGTGCCGA 240
Db 763143 AGCGTCCGGGTGGAGGTCCGCGAGTGCACCGTCCACTAGCGGCGGATGTGCCGA 763202
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATTCGGCTCGCTGTGCGTGTACGCGGG 300
Db 763203 TCGAAACCCCTGAGGGGCCCAACATCGGTCTGATTCGGCTCGCTGTGCGTGTACGCGGG 763262
Qy 301 TCAACCCGTTGCGGTTCATCGAGACCGCGTACCGCAAGGTGTGACGGCGTGTACCG 360
Db 763263 TCAACCCGTTGCGGTTCATCGAAACCGCGTACCGCAAGGTGTGTGAGCGTGTGTAGCG 763322
Qy 361 ACGAGATCCACTACTGACCGCGCGACGAGGAGGACCGCCAGTGTGTGCGCGAGGCCAACT 420
Db 763323 ACGAGATCGTACTGACCGCGCGACGAGGAGGACCGCCAGTGTGTGCGCAGGCCAACT 763382
Qy 421 CGCCGATCGACGGCAAGGGCGGGTTCGCGAGGCGCGGGTGTGCGTGTGCGCGCAAGCGG 480
Db 763383 CGCCGATCGATGCGGACGGTCTGCTGCGAGCGCGCGTGTGCGTGTGCGCGCAAGCGG 763442
Qy 481 GCGAGGTCTGAGTACGTGCGCTCTGCTGAGGTGGACTACATGGACNTKTCSCGCGCCARA 540
Db 763443 GCGAGGTGGAGTACGTGCGCTCTGCTGAGGTGGACTACATGGACNTKTCSCGCGCCARA 763502
Qy 541 TGGTGTGGTGCCACCGCGATGATCCCGTTCTCTGAGCAGCAGCGCCAAACCGTGCC 600
Db 763503 TGGTGTGGTGCCACCGCGATGATTCCTTCTTGGAGCAGCAGCGCCAAACCGTGCC 763562
Qy 601 TGATGGGCGCAACATGCAKCGCGCGGTTCCGCTGGTGTGCGCAGCGAGCGCGGTGG 660
Db 763563 TCATGGGGCAACATGCAKCGCGCGGTTCCGCTGGTGTGCGTGTGCGCAGCGAGCGCGGTGG 763622
Qy 661 TGGGACCGGATGAGGTGTGGCGGCGATGCGAGCGGG 699
Db 763623 TGGGACCGGATGAGGTGTGGCGGCGATGCGAGCGGG 763661
```

RESULT 3

US-09-103-840A-1

; Sequence 1, Application US/09103840A

; Patent No. 6294328

; GENERAL INFORMATION:

```
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37RV
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.0%; Pred. No. 7.8e-111;
Matches 636; Conservative 3; Mismatches 60; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGAGGCGGATCAACCGGACAGCCCTGATCAACATCGTCCCGTCTGTGGCGG 60
DB 761003 CCCAGGACGTGAGGCGGATCAACCGGACAGCTTGATCAACATCGGCGGTGTGCGCG 761062

QY 61 CGATCAAGAGTTCCTGGGACACAGCCAGCTGTCCAGTTTCATGACCAAGAACACCCGC 120
DB 761063 CGATCAAGAGTTCCTGGGACACAGCCAGCTGAGCCAAATTCATGACCAAGAACACCCGC 761122

QY 121 TGTGGGGCTCAACACAGCGCGCCCTGTGCGGCGTGGGCGGCGGTGTGTCTCCCGG 180
DB 761123 TGTGGGGGTGACCCACAGCGCGCCCTGTGCGGCGTGGGCGGCGGTGTGTCTCACGTG 761182

QY 181 AGCGGGCGGGGTGAGGTTCGCGACGTGACCCGTCCACATACAGCGCGGATGTCCCGGA 240
DB 761183 AGCGTGGCGGGTGGAGGTTCGCGACGTGACCCGTTCGACATACAGCGCGGATGTCCCGGA 761242

QY 241 TCGAGACCCCGAGGGTTCACATCGTGTGATCGGTTCGTGTGCGGTGTGACGCGCGG 300
DB 761243 TCGAAACCCCTGAGGGGCGCAACATCGGTCTGATCGGTTCGTGTGCGGTGTGACGCGCGG 761302

QY 301 TCAACCCGTTCCGGTTCATCGAGAGCGCGTACCGCAAGGTGTGACGCGGTGTGACCG 360
DB 761303 TCAACCCGTTCCGGTTCATCGAAACCGCGTACCGCAAGGTGTGACGCGGTGTGACCG 761362

QY 361 ACGAGATCCACTACCTGACCGCGGACGAGGAGCGCCACCGTGTGTGGCGAGGCGCAACT 420
DB 761363 ACGAGATCGTGTACCTGACCGCGGACGAGGAGCGCCACCGTGTGTGGCGAGGCGCAATT 761422

QY 421 CGCCGATCGACGGCAAGGCGCGGTTCGCGAGGCGCGGTGTGTGTCGCGCGCAAGGCGG 480
DB 761423 CGCCGATCGATCGGACGCGTCTGTCGTGAGCGCGCGGTGTGTCGCGCGCAAGGCGG 761482

QY 481 GCGAGGTGAGTACGTCCTCGTCCGAGGTGGAATACATGACATNTKSCCGCGCCARA 540
DB 761483 GCGAGGTGAGTACGTCCTCGTCCGAGGTGGAATACATGACATNTKSCCGCGCCARA 761542

QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGACCGTGTGCC 600
DB 761543 TGGTGTGCGTGGCCACCGCGATGATTCCTTCTGAGCACGACGACGACCGTGTGCC 761602

QY 601 TGATGGGCGCAACATGACACGCGGCGGTTCGCGTGTGTCGCGAGCGCGCGCTGG 660
DB 761603 TCATGGGCGCAACATGACACGCGGCGGTTCGCGTGTGTCGCGAGCGCGCGCTGG 761662

QY 661 TGGGACCGGCGATGAGCTGCGCGGCGGCGATCGACGCG 699
DB 761663 TGGGACCGGCGATGAGCTGCGCGGCGGCGATCGACGCG 761701

RESULT 4
US-08-313-185-57
```

```
; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-313-185-57

Query Match      78.7%; Score 555; DB 2; Length 3447;
Best Local Similarity 86.7%; Pred. No. 1.7e-101;
Matches 506; Conservative 3; Mismatches 90; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGCGGATCAACCGGACAGCCCTGATCAACATCGTCCCGTCTGTGGCGG 60
DB 1124 CCCAGGACGTGGAGCGGATCAACCGGACAGCGCTGATCAATATCGTCCGCTGTGTCGCG 1183

QY 61 CGATCAAGAGTTCCTGGGACACGCGCGCTGTGCGGCGTGGGCGCGGTGTGTCTGTCCCGG 120
DB 1184 CTATCAAGAGTTCCTGGGACACGCGCGCTGTGCGAGTTCGCGAGTTCATGGATCAGAACACCCCTC 1243

QY 121 TGTGGGCGCTCACCAAGGCGCGCTGTGCGGCGTGGGCGCGGTGTGTCTGTCCCGG 180
DB 1244 TGTGGGCGCTCACCAAGGCGCGGTGTGCGGCGTGGGCGCGGTGTGTCTGTCTGTGCGGTG 1303

QY 181 AGCGGGCGGGCTGGAGTTCGCGACGCTGCAACCGCTCCCACTACGCGCGGATGTGCCGA 240
DB 1304 AGCGTGGCGGGCTAGAGGTTCGCGAGCTGCAACCGCTTCGCACTACGCGCGGATGTGCCGA 1363

QY 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGTTCGCTGTGCGGTGTACGCGCGG 300
DB 1364 TCGAGACTTCGCGAGGCGCGCGCAACATAGGTCTGATCGGTTCATTCGCGGTGTACGCGCGG 1423

QY 301 TCAACCCGTTCCGGTTCATCGAGAGCGCGTACCGCAAGGTGTGTGACCGCGGTGTGTCACCG 360
DB 1424 TCAACCCGTTCCGGTTCATCGAAACACCGTACCGCAAGGTGTGACCGGTGTGTCACCG 1483
```



```

;
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/250,030
; FILING DATE: 26-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Muetting, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 150.105US1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-3061
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
;
US-08-250-030-1

Query Match 76.8%; Score 541.4; DB 1; Length 970;
Best Local Similarity 90.8%; Pred. No. 7.9e-99;
Matches 572; Conservative 3; Mismatches 55; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGAGCGGATCACACCGCAGACCTGATCAACATCCGTCCTCGTGGCGG 60
DB 341 CCCAGAGCTGAGCGGATCACACCGCAGACCTGATCAACATCCGTCCTCGTGGCGG 400
QY 61 CGATCAAGAGTTCCTCGGCACCGCAGCCAGTCCAGTTCATGACCAAGCAACACCGC 120
DB 401 CGATCAAGAGTTCCTCGGCACCGCAGCCAGTCCAGTTCATGACCAAGCAACACCGC 460
QY 121 TGTGGGGTTCACCAAGCGCGCTGTGCGCGCTGGCGCGGCTGTGTCTGTCTGTCTGT 180
DB 461 TGTGGGGTTCACCAAGCGCGCTGTGCGCGCTGGCGCGGCTGTGTCTGTCTGTCTGT 520
QY 181 AGCGGGCGGGTGGAGTTCGGGAGCGTGCACCGCTCCACTACCGCGGATGTCGCCGA 240
DB 521 AGCGTGCGGGTGGAGGAGCGGAGTGCACCGCTCCACTACCGCGGATGTCGCCGA 580
QY 241 TCGAGACCCCGAGGCTCCAAATCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCT 300
DB 581 TCGAAACCCCTGAGGGGCCAACATCGTCTGATCGGCTCGCTCGCTCGCTCGCTCGCTCG 640
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTTCAGCAAGGTGTGCAAGCGGTGTGTCAC 360
DB 641 TCAACCCGTTCCGGTTTCATCGAAACCGCGTTCAGCAAGGTGTGTCACCGGTGTGTCAC 700
QY 361 ACGAGATCCACTACTGACCGCGGAGGAGGAGCGGAGGAGCGGAGGAGGAGGAGGAGG 420
DB 701 ACGAGATCCACTACTGACCGCGGAGGAGGAGCGGAGGAGGAGGAGGAGGAGGAGGAG 760
QY 421 CGCCGATCGACCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 480
DB 761 CGCCGATCGATGGGAGCGTTCGCTCGTGCAGCGCGCGCTGTGTGTGTGTGTGTGTGT 820
QY 481 GCGAGTGCAGTACGTGCGCTCGTGCAGGTGGAATACATGACGACGACGACGACGACGAC 540
DB 821 GCGAGTGCAGTACGTGCGCTCGTGTGAGTGAATACATGAGTGAATACATGAGTGAAT 880
QY 541 TCGTGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 600
DB 881 TCGTGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 940
QY 601 TGATGGGCGCCAAACATGCAKCGCAGGCGG 630
DB 941 TCATGGGCGCCAAACATGCAKCGCAGGCGG 970
```

```

RESULT 7
PCT-US95-06790-1
; Sequence 1, Application PC/TUS9506790
; GENERAL INFORMATION:
; APPLICANT: Mayo Foundation for Medical Education and Research
; APPLICANT: and Hoffmann-La Roche Inc.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/06790
; FILING DATE: 26-MAY-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Raasch, Kevin W.
; REGISTRATION NUMBER: 35,651
; REFERENCE/DOCKET NUMBER: 150.105W01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
;
PCT-US95-06790-1

Query Match 76.8%; Score 541.4; DB 5; Length 970;
Best Local Similarity 90.8%; Pred. No. 7.9e-99;
Matches 572; Conservative 3; Mismatches 55; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGAGCGGATCACACCGCAGACCTGATCAACATCCGTCCTCGTGGCGG 60
DB 341 CCCAGAGCTGAGCGGATCACACCGCAGACCTGATCAACATCCGTCCTCGTGGCGG 400
QY 61 CGATCAAGAGTTCCTCGGCACCGCAGCCAGTCCAGTTCATGACCAAGCAACACCGC 120
DB 401 CGATCAAGAGTTCCTCGGCACCGCAGCCAGTCCAGTTCATGACCAAGCAACACCGC 460
QY 121 TGTGGGGTTCACCAAGCGCGCTGTGCGCGCTGGCGCGGCTGTGTCTGTCTGTCTGT 180
DB 461 TGTGGGGTTCACCAAGCGCGCTGTGCGCGCTGGCGCGGCTGTGTCTGTCTGTCTGT 520
QY 181 AGCGGGCGGGTGGAGTTCGGGAGCGTGCACCGCTCCACTACCGCGGAGTGTGCCGA 240
DB 521 AGCGTGCGGGTGGAGGAGCGGAGTGCACCGCTCCACTACCGCGGAGTGTGCCGA 580
QY 241 TCGAGACCCCGAGGAGTCCAAATCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCG 300
DB 581 TCGAAACCCCTGAGGGGCCAAATCGTCTGATCGGCTCGCTCGCTCGCTCGCTCGCTCG 640
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTTCAGCAAGGTGTGCAAGCGGTGTGTCAC 360
DB 641 TCAACCCGTTCCGGTTTCATCGAAACCGCGTTCAGCAAGGTGTGTCACCGGTGTGTCAC 700
QY 361 ACGAGATCCACTACTGACCGCGGAGGAGGAGCGGAGGAGGAGGAGGAGGAGGAGGAG 420
```

```
Db 701 ACGAGATCGTGTACTGACCGCGGACGAGAGGAGCCGCAACGTGGTGCAACAGGCCAATT 760
Qy 421 CGCCGATCGAGCGGAAGGCGCGGTTCGCCGAGGCGCGGGTGTGTCCGCGCGCAAGCGG 480
Db 761 CGCCGATCGATGCGGACGGTTCGTTCGTTCGAGCGCGGTCTGGTCCGCGCAAGCGG 820
Qy 481 GCGAGGTGAGTACGTGTCCTCGTCCGAGGTGGACTACATGAANWTKSCCGCGCCARA 540
Db 821 GCGAGGTGAGTACGTGTCCTCGTCTGAGGTGGACTACATGAGCGTCTCGCGCGCCAGA 880
Qy 541 TGGTGTGGTGGCGCACCGCGATGATCCCGTTCTCGACGACGACGACGACGACGACGACG 600
Db 881 TGGTGTGGTGGCGCACCGCGATGATTCCTTCCTGGAGCAGCAGCAGCAGCAGCAGCAGC 940
Qy 601 TGATGGGCGCCAAACATGCAKCGCCAGGCGG 630
Db 941 TCATGGGCGCCAAACATGCAKCGCCAGGCGG 970

RESULT 8
US-08-757-653-135
; Sequence 135, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-135

Query Match 75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 90.5%; Pred. No. 1.2e-96;
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCGTCGCGCGGCGATCAAGAGTTCTTCGCAACAGCCAGCTGTCC 95
Db 1 ATCAACATCCGCGCGGTGGTCCGCGGATCAAGAGTTCTTCGCAACAGCCAGCTGAGC 60
Qy 96 CAGTTTCATGGACCAAGCAACCCGTCGCGGGCTCACCCACAGCGCGCTGTCCGCG 155
Db 61 CAATTTCATGGACCAAGCAACCCGTCGCGGGTTGACCCCAAGCGCGCTGTCCGCG 120
```

```
Qy 156 CTGGCCCGGGTGGTCTGTCTCCCGGAGCGGGCCGGGCTGGAGGTCCTCGAGCGTGCACCCG 215
Db 121 CTGGGGCCCGGGCTGTCTGTCAAGTGTGAGCGTCCGGGGCTGGAGGTCCTCGAGCGTGCACCCG 180
Qy 216 TCCCACTACGGCGCGATGTGCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
Qy 276 GGCTCGCTGTCTGGTGTACGCGCGGTCACCCGTTTCGGGTTTCATCGAGAGCGCGTACCGC 335
Db 241 GGCTCGCTGTCTGGTGTACGCGCGGTCACCCGTTTCGGGTTTCATCGAAACGCCGTACCGC 300
Qy 336 AAGTGTGTTCGACGCGGTGGTCAACCGAGAGATTCACCTACCTGACCGCGCGAGAGGAG 395
Db 301 AAGTGTGTTCGACGCGGTGGTTCAGCGACGAGATCGTGTACCTGACCGCGCGAGAGGAG 360
Qy 396 CGCCACGTGTGGCGCAGGCGCAACTCGCCGATCGACGGCAAGGGCCGGTTCGCGAGGCG 455
Db 361 CGCCACGTGTGGCGCAGGCGCAACTTCGCCGATCGATCGCGACGGTTCGCTTCGTCGAGCG 420
Qy 456 CGGTGTCTGTTCGCGCGCAAGGCGGAGGTTCGAGTACGTCCCTCGTCCGAGGTGCAC 515
Db 421 CGGTGTCTGTTCGCGCGCAAGGCGGAGGTTCGAGTACGTCCCTCGTCCGAGGTGCAC 480
Qy 516 TACATGGACNTKTCSCGCGCCARATGGTGTTCGGTGGCCACCGCGATGATCCCTTCCTC 575
Db 481 TACATGGACNTKTCGCGCGCCARATGGTGTTCGGTGGCCACCGCGATGATTCCTTCCTG 540
Qy 576 GAGCAGCAGCAGCAGCAGCAGTGGTCCCTGATGGGCGCCAAACATGCAKCGCGCGGTTCG 635
Db 541 GAGCAGCAGCAGCAGCAGCAGTGGTCCCTGATGGGCGCCAAACATGCAKCGCGCGGTTCG 600
Qy 636 CTGGTGGCGCAGCGANGCGCC 655
Db 601 CTGGTGGCGCAGCGANGCGCC 620

RESULT 9
US-08-757-653-138/c
; Sequence 138, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
```

SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match 75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 90.5%; Pred. No. 1.2e-96;
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

36 ATCAACATCCGTCCTGTCGCGGATCAAGGAGTTCTTCGGCACAGCCAGCTGTCC 95
620 ATCAACATCCGTCCTGTCGCGGATCAAGGAGTTCTTCGGCACAGCCAGCTGTAGC 561

96 CAGTTTCATGGACAGAACACCGCTGTCTGGGGCTCACCCAAAGCGCGCTGTCTGGCG 155
560 CAATTTCATGGACAGAACACCGCTGTCTGGGGTTGACCCAAAGCGCGCTGTCTGGCG 501

156 CTGGGCGCGGTGTCTGTCCGGGAGCGGGCTGGAGTCCGGACGTCGACCCG 215
500 CTGGGCGCGGTGTCTGTACGTCGAGCGTGTCTGGGGCTGGAGTCCGGACGTCGACCCG 441

216 TCCCACTACGCGCGATGTCCCGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC 275
440 TCGCACTACGCGCGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 381

276 GCGTCGCTGTCTGTCTGTCGCGGCTCAACCCGTTTCGAGTTCATCGAGACGCGTACCGC 335
380 GCGTCGCTGTCTGTCTGTCGCGGCTCAACCCGTTTCGAGTTCATCGAAACGCGTACCGC 321

336 AAGTGTGTCTGTCGCGGTGTCTACCGAGATCTCACTTCTGTCGCGGACGCGGAGGAGC 395
320 AAGTGTGTCTGTCGCGGTGTCTAGCGAGATCTGTCTGTCGCGGACGCGGAGGAGC 261

396 CGCCAGTGTGTCTGTCGCGGTGTCTGTCGCGGACGCGGAGGAGGAGGAGGAGGAGGAG 455
260 CGCCAGTGTGTCTGTCGCGGTGTCTGTCGCGGACGCGGAGGAGGAGGAGGAGGAGGAG 201

456 CGGTCGCTGTCTGTCGCGGACGCGGAGGAGTCTGTCGCGGACGCGGAGGAGGAGGAGGAG 515
200 CGGTCGCTGTCTGTCGCGGACGCGGAGGAGTCTGTCGCGGACGCGGAGGAGGAGGAGGAG 141

516 TACATGACNTKTCGCGGACGCGGATGTCTGTCGCGGACGCGGAGGAGGAGGAGGAGGAG 575
140 TACATGACNTKTCGCGGACGCGGATGTCTGTCGCGGACGCGGAGGAGGAGGAGGAGGAG 81

576 GAGCAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 635
80 GAGCAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 21

636 CTGGTCCGACGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 655
20 CTGGTCCGACGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1

RESULT 10
US-08-520-946-135
Sequence 135, Application US/08520946
Patent No. 6372424

GENERAL INFORMATION:
APPLICANT: BROW, MARY ANN D.
APPLICANT: LYAMICHEV, VICTOR I.
APPLICANT: OLIVE, DAVID M.
TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF PATHOGENS
NUMBER OF SEQUENCES: 160
CORRESPONDENCE ADDRESS:
ADDRESS: MEDLEN & CARROLL
STREET: 220 MONTGOMERY STREET, SUITE 2200
CITY: SAN FRANCISCO
STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA: US/08/520,946
APPLICATION NUMBER: US/08/520,946
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: CARROLL, PETER G.
REGISTRATION NUMBER: 32,837
REFERENCE/DOCKET NUMBER: FORS-01756
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 135:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

Query Match 75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 90.5%; Pred. No. 1.2e-96;
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

36 ATCAACATCCGTCCTGTCGCGGATCAAGGAGTTCTTCGGCACAGCCAGCTGTCC 95
1 ATCAACATCCGTCCTGTCGCGGATCAAGGAGTTCTTCGGCACAGCCAGCTGTAGC 60

96 CAGTTTCATGGACAGAACACCGCTGTCTGGGGCTCACCCAAAGCGCGCTGTCTGGCG 155
61 CAATTTCATGGACAGAACACCGCTGTCTGGGGTTGACCCAAAGCGCGCTGTCTGGCG 120

156 CTGGGCGCGGTGTCTGTCTCCGGGAGCGGCTTCGAGGTTCCGCGAGTCTGACCCG 215
121 CTGGGCGCGGTGTCTGTCTACGTCGAGGTCGCGGGTTCGAGGTCGCGACCG 180

216 TCCCACTACGCGCGATGTCTCCGATCGAGACCCCGGAGGTTCCCAACATCGTCTGATC 275
181 TCGCACTACGCGCGATGTCTCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 240

276 GCGTCGCTGTCTGTCGCGGCTCAACCCGTTTCGAGTTCATCGAGACGCGTACCGC 335
241 GCGTCGCTGTCTGTCGCGGCTCAACCCGTTTCGAGTTCATCGAAACGCGTACCGC 300

336 AAGTGTGTCTGTCGCGGCTCAACCGATCCACTACCTGACCGCGGACGAGGAGGAGC 395
301 AAGTGTGTCTGTCGCGGCTGTAGCGAGATCTGTCTGACCGCGGACGAGGAGGAGC 360

396 CGCCAGTGTGTCTGTCGCGGCTCAACCTGCGGATCGAGGAGGAGGAGGAGGAGGAGGAG 455
361 CGCCAGTGTGTCTGTCGCGGCTCAACCTGCGGATCGAGGAGGAGGAGGAGGAGGAGGAG 420

456 CGGTCGCTGTCTGTCGCGGCTCAACCGATCGAGTACGTCGCTTCGCGAGGAGGAGC 515
421 CGGTCGCTGTCTGTCGCGGCTCAACCGATCGAGTACGTCGCTTCGCGAGGAGGAGC 480

516 TACATGACNTKTCGCGGACGCGGATGTCTGTCGCGGACGCGGAGGAGGAGGAGGAGGAG 575
481 TACATGACNTKTCGCGGACGCGGATGTCTGTCGCGGACGCGGAGGAGGAGGAGGAGGAG 540

576 GAGCAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 635
541 GAGCAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 600

636 CTGGTCCGACGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 655

```
Db      601 CTGTCCTAGCGAGGCCCC 620

RESULT 11
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-138

Query Match      75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 90.5%; Pred. No. 1.2e-96;
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCGCGCGGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCC 95
Db      620 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGTTCTTCGGCACCAGCCAGCTGAGC 561

Qy      96 CAGTTATGACCAAGAAACCCGTCGTGGGGCTCACCCACAAGCGCGCTGTGCGCG 155
Db      560 CAATTATGACCAAGAAACCCGTCGTGGGGTTGACCCACAAGCGCGCTGTGCGCG 501

Qy      156 CTGGGCCCGGTGTGTCGTCGCGGAGCGCGCGCTGGAGGTCCGCGAGCTGCACCCG 215
Db      500 CTGGGGCCCGCGGTGTGTCACGTGAGCGTCCGCGGTGGAGGTCCGCGAGCTGCACCCG 441

Qy      216 TCCCACTACGCCGCGATGTGCCGATCAGACCCCGGAGGTGCCAACATCGGTCTGATC 275
Db      440 TCGCACTACGCCGCGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

Qy      276 GGCTCGCTGTGCGGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAGACGCCGTACCGC 335
Db      380 GGCTCGCTGTGCGGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCGC 321

Qy      336 AAGGTGTCGACGGGTGTCACCGACAGATCCACTACCTGACCGCGCAGGAGGAC 395
Db      320 AAGGTGTCGACGGGTGTTAGCGACAGAGATCGTGTACCTGTGACCGCGCAGGAGGAC 261

Qy      396 CGCCACGTGTGGCGCAGGCCAACTCGCCGATCGACGGCAAGGCCCGGTTTCGCCGAGGCC 455
Db      260 CGCCACGTGTGGCACAGGCCAATTCGCCGATCGATCGGAGCGTTCGTTCTGCGAGCGG 201

Qy      456 CGGTGTGTGTCGCCCGCAAGCGCGGAGGTCCAGTACGTGCCCTCGTCCGAGGTGAC 515
Db      200 CGCGTGTGTGTCGCCCGCAAGCGCGGAGGTACGTGCCCTCGTCTGAGGTGAC 141

Qy      516 TACATGACNTKTCSCCGCCCARATGTTGTCGGTGGCCACCGGATGATCCCGTTCCTC 575
Db      140 TACATGACGTCCTCGCCCGCCAGATGTTGTCGGTGGCCACCGGATGATTCCTTCTG 81

Qy      576 GAGCACGACGACCAACCGTCCCTGATGGCGGCCCAACATCGACCGCGGCTTCG 635
Db      80 GAGCACGACGACCAACCGTGCCTCATGGGGCAACATCGACCGCGGCGGTGCGG 21

Qy      636 CTGTGCGCAGCGANGGCC 655
Db      20 CTGTGCGTAGCGAGGCC 1

RESULT 12
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match      75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 90.5%; Pred. No. 1.2e-96;
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCGCGCGGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCC 95
Db      1 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGTTCTTCGGCACCAGCCAGCTGAGC 60
```

QY 96 CAGTTTCATGGACAGACCAACCGCTGTCTGGGGCTCACCCACAAGCGCGCTGTCTGGCG 155
Db 61 CAATTTCATGGACAGACCAACCGCTGTCTGGGGTTGACCCACAAGCGCGCTGTCTGGCG 120
QY 156 CTGGGCGCGGGTGTCTGTCTGGGAGCGCGCGGGCTGGAGGTCCGCGACGTGCACCG 215
Db 121 CTGGGCGCGGGTGTCTGTCTGGGAGCGCGCGGGCTGGAGGTCCGCGACGTGCACCG 180
QY 216 TCCCACTACGCGCGGATGTCGGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCCCACTACGCGCGGATGTCGGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 240
QY 276 GCGTCTGTCTGGTACGCGCGGGTCAACCGGTTCGGGTTTCATCGAGACGCGTACCGC 335
Db 241 GCGTCTGTCTGGTACGCGCGGGTCAACCGGTTCGGGTTTCATCGAGACGCGTACCGC 300
QY 336 AAGTGTGTCTACGCGCGGTGTCTACCGACGAGATCCACTACTGACCGCGCGACGAGGAC 395
Db 301 AAGTGTGTCTACGCGCGGTGTCTACCGACGAGATCGTGTACTGACCGCGCGACGAGGAC 360
QY 396 CCGCACTGTGTGGCGAGGCCAACTCGCGATCGACGCGCAAGGCGGGTTCGCCAGGCC 455
Db 361 CCGCACTGTGTGGCGAGGCCAACTCGCGATCGATGCGGACGCTCGCTTCGTCGAGCG 420
QY 456 CCGGTGTGTCTGGCGAGCGCGGCGAGGTCTGAGTACGTGCGCTTCGTCGAGGTGAC 515
Db 421 CCGGTGTGTCTGGCGAGCGCGGCGAGGTCTGAGTACGTGCGCTTCGTCGAGGTGAC 480
QY 516 TACATGGACNTKTCSCCGCGCCARATGGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTC 575
Db 481 TACATGGACNTKTCSCCGCGCCARATGGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTC 540
QY 576 GAGCAGCAGCAGCCCAACCGTCTGATGGCGCCCAACATGCAKCGCAGCGGTTCG 635
Db 541 GAGCAGCAGCAGCCCAACCGTCTGATGGCGCCCAACATGCAKCGCAGCGGTTCG 600
QY 636 CTGGTGGCAGCGGCGGCC 655
Db 601 CTGGTGGTACGAGGCGGCC 620

RESULT 13

US-09-655-378A-138/c

; Sequence 138, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; LYAMICHEV, VICTOR I.

; OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent In Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 138:

US-09-655-378A-138

Query Match

Best Local Similarity 75.2%; Score 530.4; DB 4; Length 620;

Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCCGTCCGTCGTCGCGCGATCAAGGAGTTCTTCGGCACCGACCGTGTCTCC 95
Db 620 ATCAACATCCCGTCGTCGTCGCGCGATCAAGGAGTTCTTCGGCACCGACCGTGTCTCC 561
QY 96 CAGTTTCATGGACAGACCAACCGCTGTCTGGGGTCTACCCACAAGCGCGCTGTCTGGCG 155
Db 560 CAATTTCATGGACAGACCAACCGCTGTCTGGGGTCTACCCACAAGCGCGCTGTCTGGCG 501
QY 156 CTGGGCGCGGGTGTCTGTCTCCGGGAGCGCGCGGGCTGGAGGTCCGCGACGTGCACCGC 215
Db 500 CTGGGCGCGGGTGTCTGTCTACGTGAGCGTCTCCGGGCTGGAGGTCCGCGACGTGCACCGC 441
QY 216 TCCCACTACGCGCGGATGTGCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 440 TCGCACTACGCGCGGATGTGCCGATCGAACCCTCTGAGGGGCCCAACATCGGTCTGATC 381
QY 276 GCGTCTGTCTGGTGTACGCGCGGTCAACCCGTTCTGGGTTTCATCGAGACGCGTACCGC 335
Db 380 GCGTCTGTCTGGTGTACGCGCGGTCAACCCGTTCTGGGTTTCATCGAAGCGCGTACCGC 321
QY 336 AAGTGTGTCTGACGCGGTGTCAACGACGAGATCCACTACCTGACCGCGCGACGAGGAGAC 395
Db 320 AAGTGTGTCTGACGCGGTGTGAGCGACGAGATCGTGTACCTGACCGCGCGACGAGGAGAC 261
QY 396 CGCCACGCGTGGCGCGAGGCCAACTCGCCGATCGACGCGCAAGGGCGGTTCGCCGAGGCC 455
Db 260 CGCCACGCGTGGCGCGAGGCCAACTCGCCGATCGATCGGACGCGTCTGTCTGAGCGCG 201
QY 456 CCGGTGTCTGTCTCCGCGCAAGCGCGGCGAGGTCTGAGTACGTACGTCTCGTCTGAGGTGAC 515
Db 200 CCGGTGTCTGTCTCCGCGCAAGCGCGGCGAGGTCTGAGTACGTCTCGTCTGAGGTGAC 141
QY 516 TACATGGACNTKTCSCCGCGCCARATGGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTC 575
Db 140 TACATGGACNTKTCSCCGCGCCARATGGTGTCTGGTGGCCACCGCGATGATTCCTTCCTG 81
QY 576 GAGCAGCAGCAGCCCAACCGTCTGATGGCGCCCAACATGCAKCGCAGCGCGGTTCG 635
Db 80 GAGCAGCAGCAGCCCAACCGTCTGATGGCGCCCAACATGCAKCGCAGCGCGGTTCG 21
QY 636 CTGGTGGCAGCGGAGCGCC 655
Db 20 CTGGTGGTACGAGGCGGCC 1

RESULT 14

US-08-757-653-136

; Sequence 136, Application US/08757653

; Patent No. 5843669

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190


```

Db      241 GCGTCGCTCGGTACGCGGGGTCAACCGTTGCGGTTTCATCGAAACGCCGTACCGC 300
Qy      336 AAGGTGGTTCGACGGCGTGTCTACCGACGAGATCCACTACCTGACCGCGCGACGAGAGGAC 395
Db      301 AAGGTGGTTCGACGGCGTGTCTAGCGACGAGATCGTGTACCTGACCGCGCGACGAGAGGAC 360
Qy      396 CGCCACGTGTGGCGCGAGGCCAACTCGCCGATCGACGGCAAGGGCGCGGTTGCGCCGAGGCC 455
Db      361 CGCCACGTGTGGCGAGGCCAAATTCGCCGATCGATGCGGACGGTTCGCTTCGTGAGCCG 420
Qy      456 CGGGTGTCTGTCGCGCGCAAGCGCGGCGAGGTTCGAGTACGTGCCCTTCGTCCGAGGTGGAC 515
Db      421 CGCGTGTCTGTCGCGCGCAAGCGCGGCGAGGTGGAGTACGTGCCCTTCGTCTGAGGTGGAC 480
Qy      516 TACATGGACNTKTCSCCGCGCCARATGGTGTGCGTGGGCCACCGCGGATGATCCCGTTCCTC 575
Db      481 TACATGGACGTCTCGCCCGCCGAGATGGTGTGCGTGGGCCACCGCGGATGATCCCTTCCTG 540
Qy      576 GAGCAGCAGCGACGCCAAACCGTCCCTGATGGGCGCCAAACATGCAKCGCGAGCGGTTCCG 635
Db      541 GAGCAGCAGCGACGCCAAACCGTCCCTCATGGGGGCAACATGCAKCGCGAGCGGTTCCG 600
Qy      636 CTGGTCCGCGCGANGCGCC 655
Db      601 CTGGTCCGTAGCGAGGCCCC 620

```

Search completed: August 24, 2005, 22:24:13
 Job time : 114.459 secs

This Page Blank (uspio)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 21:58:55 ; Search time 451.661 Seconds
(without alignments)
10213.139 Million cell updates/sec

Title: US-09-285-306-3

Perfect score: 705

Sequence: 1 cccaggacgtgagcgatc.....ggcgatcgagcgcgacgt 705

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 7331713 seqs, 327154945 residues

Total number of hits satisfying chosen parameters: 14663426

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications NA:*

1:	/cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq.*
2:	/cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq.*
3:	/cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq.*
4:	/cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq.*
5:	/cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq.*
6:	/cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq.*
7:	/cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq.*
8:	/cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq.*
9:	/cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq.*
10:	/cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq.*
11:	/cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq.*
12:	/cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq.*
13:	/cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq.*
14:	/cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq.*
15:	/cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq.*
16:	/cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq.*
17:	/cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq.*
18:	/cgn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq.*
19:	/cgn2_6/ptodata/1/pubpna/US10G_PUBCOMB.seq.*
20:	/cgn2_6/ptodata/1/pubpna/US10H_PUBCOMB.seq.*
21:	/cgn2_6/ptodata/1/pubpna/US10I_PUBCOMB.seq.*
22:	/cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
23:	/cgn2_6/ptodata/1/pubpna/US11A_PUBCOMB.seq.*
24:	/cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq.*
25:	/cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq.*
26:	/cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	ID	Description
1	701.4	99.5	705	US-09-285-306-3
2	695	98.6	705	US-09-285-306-4
3	695	98.6	705	US-09-285-306-5
4	695	98.6	705	US-09-285-306-6
5	695	98.6	705	US-09-285-306-7
6	695	98.6	705	US-09-285-306-8
7	695	98.6	705	US-09-285-306-9

8	695	98.6	705	9	US-09-285-306-12	Sequence 12, Appl
9	695	98.6	705	9	US-09-285-306-13	Sequence 13, Appl
10	695	98.6	705	9	US-09-285-306-14	Sequence 14, Appl
11	695	98.6	705	9	US-09-285-306-16	Sequence 16, Appl
12	695	98.6	705	9	US-09-285-306-17	Sequence 17, Appl
13	695	98.6	705	9	US-09-285-306-24	Sequence 24, Appl
14	693	98.3	705	9	US-09-285-306-11	Sequence 11, Appl
15	683	96.9	705	9	US-09-285-306-10	Sequence 10, Appl
16	681	96.6	3444	17	US-10-282-122A-25737	Sequence 25737, A
17	677	96.0	687	9	US-09-285-306-18	Sequence 18, Appl
18	677	96.0	687	9	US-09-285-306-19	Sequence 19, Appl
19	677	96.0	687	9	US-09-285-306-20	Sequence 20, Appl
20	677	96.0	687	9	US-09-285-306-21	Sequence 21, Appl
21	677	96.0	687	9	US-09-285-306-22	Sequence 22, Appl
22	677	96.0	687	9	US-09-285-306-23	Sequence 23, Appl
23	677	96.0	687	9	US-09-285-306-25	Sequence 25, Appl
24	677	96.0	687	9	US-09-285-306-27	Sequence 27, Appl
25	656.6	93.1	705	9	US-09-285-306-143	Sequence 143, App
26	655	92.9	705	9	US-09-285-306-144	Sequence 144, App
27	651.8	92.5	705	9	US-09-285-306-87	Sequence 87, Appl
28	651.8	92.5	705	9	US-09-285-306-88	Sequence 88, Appl
29	651.8	92.5	705	9	US-09-285-306-90	Sequence 90, Appl
30	651.8	92.5	705	9	US-09-285-306-92	Sequence 92, Appl
31	651.8	92.5	705	9	US-09-285-306-96	Sequence 96, Appl
32	651.8	92.5	705	9	US-09-285-306-181	Sequence 181, App
33	650.6	92.3	705	9	US-09-285-306-84	Sequence 84, Appl
34	650.6	92.3	705	9	US-09-285-306-86	Sequence 86, Appl
35	650.6	92.3	705	9	US-09-285-306-93	Sequence 93, Appl
36	650.6	92.3	705	9	US-09-285-306-94	Sequence 94, Appl
37	650.6	92.3	705	9	US-09-285-306-95	Sequence 95, Appl
38	649	92.1	705	9	US-09-285-306-85	Sequence 85, Appl
39	649	92.1	705	9	US-09-285-306-89	Sequence 89, Appl
40	649	92.1	705	9	US-09-285-306-91	Sequence 91, Appl
41	638.6	90.6	687	9	US-09-285-306-146	Sequence 146, App
42	638.6	90.6	687	9	US-09-285-306-148	Sequence 148, App
43	634.6	90.0	705	9	US-09-285-306-75	Sequence 75, Appl
44	633.8	89.9	687	9	US-09-285-306-100	Sequence 100, App
45	632.2	89.7	687	9	US-09-285-306-99	Sequence 99, Appl

ALIGNMENTS

RESULT 1
US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Afymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-3

```
Query Match      99.5%; Score 701.4; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 7.9e-155;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCGCCCTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCGCCCTCGTGGCGG 60

Qy 61 CGATCAAGAGGTTCTTCGGCACCAGCCAGCTGTCTCCAGTTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGAGGTTCTTCGGCACCAGCCAGCTGTCTCCAGTTTCATGACACAGAACACCCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCCGCCCTGTCCGGCGCTCGGCCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCCGCCCTGTCCGGCGCTCGGCCCGGGTGGTCTGTCCCGGG 180

Qy 181 AGCGGGCCGGGCTGGAGGTCGGCAGCTGCGCAGCTGCAACCGTCCCACTACGGCCGGATGTCGCCGA 240
Db 181 AGCGGGCCGGGCTGGAGGTCGGCAGCTGCGCAGCTGCAACCGTCCCACTACGGCCGGATGTCGCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTACGCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTACGCGCGGG 300

Qy 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGGCGTGTACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGGCGTGTACCG 360

Qy 361 ACGAGATCCACTACTGACCGCGCAGAGGAGCCGCACTGATGAGACCGGTCGTCGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCGCGCAGAGGAGCCGCACTGATGAGACCGGTCGTCGCGAGGCCAACT 420

Qy 421 CGCCGATCGAGCGCAAGGCGCGGTTTCGCGGAGGCCCGGTCTGTCGCGCGCAAGCGG 480
Db 421 CGCCGATCGAGCGCAAGGCGCGGTTTCGCGGAGGCCCGGTCTGTCGCGCGCAAGCGG 480

Qy 481 GCGAGGTCGAGTACGTGCTTCGTCGAGGTGGACTACATGAGACNTKTCSCCGGCCARA 540
Db 481 GCGAGGTCGAGTACGTGCTTCGTCGAGGTGGACTACATGAGACNTKTCSCCGGCCARA 540

Qy 541 TGGTGTCCGTGGCCACCCCGATGATCCCGTTCTTCGAGCAGCAGCCCAACCGTGCCC 600
Db 541 TGGTGTCCGTGGCCACCCCGATGATCCCGTTCTTCGAGCAGCAGCCCAACCGTGCCC 600

Qy 601 TGATGGGCGCCAAATGCAKCGCCAGGCGGTTCCGCTGTCGCGAGCGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGCAKCGCCAGGCGGTTCCGCTGTCGCGAGCGGCGCGCTGG 660

Qy 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
```

RESULT 2

US-09-285-306-4

; Sequence 4, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingers, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 4

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-4

Query Match 98.6%; Score 695; DB 9; Length 705;

Best Local Similarity 98.6%; Pred. No. 2.5e-153;

Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

```
Qy 1 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCGCCCTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCGCCCTCGTGGCGG 60

Qy 61 CGATCAAGAGGTTCTTCGGCACCAGCCAGCTGTCTCCAGTTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGAGGTTCTTCGGCACCAGCCAGCTGTCTCCAGTTTCATGACACAGAACACCCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCCGCCCTGTCCGGCGCTCGGCCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCCGCCCTGTCCGGCGCTCGGCCCGGGTGGTCTGTCCCGGG 180

Qy 181 AGCGGGCCGGGCTGGAGGTCGGCAGCTGCGCAGCTGCAACCGTCCCACTACGGCCGGATGTCGCCGA 240
Db 181 AGCGGGCCGGGCTGGAGGTCGGCAGCTGCGCAGCTGCAACCGTCCCACTACGGCCGGATGTCGCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTACGCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTACGCGCGGG 300

Qy 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGGCGTGTACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGGCGTGTACCG 360

Qy 361 ACGAGATCCACTACTGACCGCGCAGAGGAGCCGCACTGATGAGACCGGTCGTCGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCGCGCAGAGGAGCCGCACTGATGAGACCGGTCGTCGCGAGGCCAACT 420

Qy 421 CGCCGATCGAGCGCAAGGCGCGGTTTCGCGGAGGCCCGGTCTGTCGCGCGCAAGCGG 480
Db 421 CGCCGATCGAGCGCAAGGCGCGGTTTCGCGGAGGCCCGGTCTGTCGCGCGCAAGCGG 480

Qy 481 GCGAGGTCGAGTACGTGCTTCGTCGAGGTGGACTACATGAGACNTKTCSCCGGCCARA 540
Db 481 GCGAGGTCGAGTACGTGCTTCGTCGAGGTGGACTACATGAGACNTKTCSCCGGCCARA 540

Qy 541 TGGTGTCCGTGGCCACCCCGATGATCCCGTTCTTCGAGCAGCAGCCCAACCGTGCCC 600
Db 541 TGGTGTCCGTGGCCACCCCGATGATCCCGTTCTTCGAGCAGCAGCCCAACCGTGCCC 600

Qy 601 TGATGGGCGCCAAATGCAKCGCCAGGCGGTTCCGCTGTCGCGAGCGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGCAKCGCCAGGCGGTTCCGCTGTCGCGAGCGGCGCGCTGG 660

Qy 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
```

RESULT 3

US-09-285-306-5

; Sequence 5, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingers, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 5

; LENGTH: 705

```

; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-5

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 2.5e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGACGTGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCCGTCGTGGCGG 60
DB 1 CCCAGACGTGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCCGTCGTGGCGG 60
QY 61 CGATCAAGAGTCTTCGGCACCAGCAGCTGCTCCAGTTTCATGACACAGAACACCCGC 120
DB 61 CGATCAAGAGTCTTCGGCACCAGCAGCTGCTCCAGTTTCATGACACAGAACACCCGC 120
QY 121 TGTGGGGCTCACCCACAAGCCCGCTGTGCGCGCTGGGCCGGGTGCTGTCCCGGG 180
DB 121 TGTGGGGCTCACCCACAAGCCCGCTGTGCGCGCTGGGCCGGGTGCTGTCCCGGG 180
QY 181 AGCGGGCCGGGTGAGGTCCCGAGTGCACCCGTCCCACTACCGCCGGATGTGCCGA 240
DB 181 AGCGGGCCGGGTGAGGTCCCGAGTGCACCCGTCCCACTACCGCCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGTTCCAACTCGTCTGATCGGCTCGCTGCGGTGATGCGCGG 300
DB 241 TCGAGACCCCGAGGTTCCAACTCGTCTGATCGGCTCGCTGCGGTGATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGTCGACGCGGTGTCACCG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGTCGACGCGGTGTCACCG 360
QY 361 ACGAGATCCACTACTGACCCCGCAGAGGAGGACCGCAACTGTTGGCGCAGGCAACT 420
DB 361 ACGAGATCCACTACTGACCCCGCAGAGGAGGACCGCAACTGTTGGCGCAGGCAACT 420
QY 421 CGCCGATCGACGCAAGGCGGTTTCGCGAGGCGCGGTGCTGTCGCGCAGAGGCGG 480
DB 421 CGCCGATCGACGCAAGGCGGTTTCGCGAGGCGCGGTGCTGTCGCGCAGAGGCGG 480
QY 481 GCGAGTCCAGTACGTGCGCTTCCTCGAGTGGACTACATGACNTKTCSCCGCCCARA 540
DB 481 GCGAGTCCAGTACGTGCGCTTCCTCGAGTGGACTACATGACNTKTCSCCGCCCARA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCACCACCGTGCCC 600
DB 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCACCACCGTGCCC 600
QY 601 TGATGGGCGCCAAACATGCAKCGCCAGCGGTTCCGCTGTCGCGACGAGCGCGCTGG 660
DB 601 TGATGGGCGCCAAACATGCAKCGCCAGCGGTTCCGCTGTCGCGACGAGCGCGCTGG 660
QY 661 TGGGCACCGGATGGAGCTGCGCGGCGGATCGACGCGGACGT 705
DB 661 TGGGCACCGGATGGAGCTGCGCGGCGGATCGACGCGGACGT 705

```

```

RESULT 4
US-09-285-306-6
; Sequence 6, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0

```

```

RESULT 5
US-09-285-306-7
; Sequence 7, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0

```

```

; SEQ ID NO 6
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-6

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 2.5e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGACGTGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCCGTCGTGGCGG 60
DB 1 CCCAGACGTGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCCGTCGTGGCGG 60
QY 61 CGATCAAGAGTCTTCGGCACCAGCAGCTGCTCCAGTTTCATGACACAGAACACCCGC 120
DB 61 CGATCAAGAGTCTTCGGCACCAGCAGCTGCTCCAGTTTCATGACACAGAACACCCGC 120
QY 121 TGTGGGGCTCACCCACAAGCCCGCTGTGCGCGCTGGGCCGGGTGCTGTCCCGGG 180
DB 121 TGTGGGGCTCACCCACAAGCCCGCTGTGCGCGCTGGGCCGGGTGCTGTCCCGGG 180
QY 181 AGCGGGCCGGGTGAGGTCCCGAGTGCACCCGTCCCACTACCGCCGGATGTGCCGA 240
DB 181 AGCGGGCCGGGTGAGGTCCCGAGTGCACCCGTCCCACTACCGCCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGTTCCAACTCGTCTGATCGGCTCGCTGCGGTGATGCGCGG 300
DB 241 TCGAGACCCCGAGGTTCCAACTCGTCTGATCGGCTCGCTGCGGTGATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGTCGACGCGGTGTCACCG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGTCGACGCGGTGTCACCG 360
QY 361 ACGAGATCCACTACTGACCCCGCAGAGGAGGACCGCAACTGTTGGCGCAGGCAACT 420
DB 361 ACGAGATCCACTACTGACCCCGCAGAGGAGGACCGCAACTGTTGGCGCAGGCAACT 420
QY 421 CGCCGATCGACGCAAGGCGGTTTCGCGAGGCGCGGTGCTGTCGCGCAGAGGCGG 480
DB 421 CGCCGATCGACGCAAGGCGGTTTCGCGAGGCGCGGTGCTGTCGCGCAGAGGCGG 480
QY 481 GCGAGTCCAGTACGTGCGCTTCCTCGAGTGGACTACATGACNTKTCSCCGCCCARA 540
DB 481 GCGAGTCCAGTACGTGCGCTTCCTCGAGTGGACTACATGACNTKTCSCCGCCCARA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCACCACCGTGCCC 600
DB 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCACCACCGTGCCC 600
QY 601 TGATGGGCGCCAAACATGCAKCGCCAGCGGTTCCGCTGTCGCGACGAGCGCGCTGG 660
DB 601 TGATGGGCGCCAAACATGCAKCGCCAGCGGTTCCGCTGTCGCGACGAGCGCGCTGG 660
QY 661 TGGGCACCGGATGGAGCTGCGCGGCGGATCGACGCGGACGT 705
DB 661 TGGGCACCGGATGGAGCTGCGCGGCGGATCGACGCGGACGT 705

```

```

; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-7

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 2.5e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;
QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCCTCGTGGCGG 60
DB 1 CCCAGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCTGGCGG 60
QY 61 CGATCAAGAGTTCTTCGGCACCCAGCAGCTGTCCAGTTTCATGACAGCAACACCGC 120
DB 61 CGATCAAGAGTTCTTCGGCACCCAGCAGCTGTCCAGTTTCATGACAGCAACACCGC 120
QY 121 TGTCCGGGCTACCCACAAGCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGG 180
DB 121 TGTCCGGGCTACCCACAAGCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGG 180
QY 181 AGCGGCCCGGGCTGGAGGTCGCGAGCTGCACCCCGTCCCACTACCGCGCGATGTGCCGA 240
DB 181 AGCGGCCCGGGCTGGAGGTCGCGAGCTGCACCCCGTCCCACTACCGCGCGATGTGCCGA 240
QY 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCGTATCGGTCGTGTGTCGTCGTCGCGG 300
DB 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCGTATCGGTCGTGTGTCGTCGTCGCGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGAAGGTGTGACGCGGTCGTCACCG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGAAGGTGTGACGCGGTCGTCACCG 360
QY 361 ACAGATCCACTACCTACCTGACCGCGCAGAGGAGCCGCACTGTCGTCGTCGTCGTCG 420
DB 361 ACAGATCCACTACCTACCTGACCGCGCAGAGGAGCCGCACTGTCGTCGTCGTCGTCG 420
QY 421 CGCGGATCGACGCGAAGGCGCGGTTTCGCGAGGCGCGGTCGTCGTCGTCGTCGTCGTCG 480
DB 421 CGCGGATCGACGCGAAGGCGCGGTTTCGCGAGGCGCGGTCGTCGTCGTCGTCGTCGTCG 480
QY 481 GCAGGTCGAGTACGTCGCTCGTCGAGGTGCACTACATGACGACGTCGTCGTCGTCGTCG 540
DB 481 GCAGGTCGAGTACGTCGCTCGTCGAGGTGCACTACATGACGACGTCGTCGTCGTCGTCG 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAAGACGACGTCGTCGTCGTCG 600
DB 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAAGACGACGTCGTCGTCGTCG 600
QY 601 TGAATGGGCGCCCAACATGCAKCGCCAGGCGGTTCCGCTGGTGGCGAGCGGCGCGTGG 660
DB 601 TGAATGGGCGCCCAACATGCAKCGCCAGGCGGTTCCGCTGGTGGCGAGCGGCGCGTGG 660
QY 661 TGGGCACCGGCGATGGAGCTGCGCGCGCGGATCGACGCGCGACGTCGTCGTCGTCGTCG 705
DB 661 TGGGCACCGGCGATGGAGCTGCGCGCGCGGATCGACGCGCGACGTCGTCGTCGTCGTCG 705

RESULT 6
US-09-285-306-8
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Drenkow, Thomas
; APPLICANT: Gengeras, Thomas
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700S
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-8

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 2.5e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;
QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCCTCGTGGCGG 60
DB 1 CCCAGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCTGGCGG 60
QY 61 CGATCAAGAGTTCTTCGGCACCCAGCAGCTGTCCAGTTTCATGACAGCAACACCGC 120
DB 61 CGATCAAGAGTTCTTCGGCACCCAGCAGCTGTCCAGTTTCATGACAGCAACACCGC 120
QY 121 TGTCCGGGCTACCCACAAGCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGG 180
DB 121 TGTCCGGGCTACCCACAAGCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGG 180
QY 181 AGCGGCCCGGGCTGGAGGTCGCGAGCTGCACCCCGTCCCACTACCGCGCGATGTGCCGA 240
DB 181 AGCGGCCCGGGCTGGAGGTCGCGAGCTGCACCCCGTCCCACTACCGCGCGATGTGCCGA 240
QY 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCGTATCGGTCGTGTGTCGTCGTCGCGG 300
DB 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCGTATCGGTCGTGTGTCGTCGTCGCGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGAAGGTGTGACGCGGTCGTCACCG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGAAGGTGTGACGCGGTCGTCACCG 360
QY 361 ACAGATCCACTACCTACCTGACCGCGCAGAGGAGCCGCACTGTCGTCGTCGTCGTCG 420
DB 361 ACAGATCCACTACCTACCTGACCGCGCAGAGGAGCCGCACTGTCGTCGTCGTCGTCG 420
QY 421 CGCGGATCGACGCGAAGGCGCGGTTTCGCGAGGCGCGGTCGTCGTCGTCGTCGTCGTCG 480
DB 421 CGCGGATCGACGCGAAGGCGCGGTTTCGCGAGGCGCGGTCGTCGTCGTCGTCGTCGTCG 480
QY 481 GCAGGTCGAGTACGTCGCTCGTCGAGGTGCACTACATGACGACGTCGTCGTCGTCGTCG 540
DB 481 GCAGGTCGAGTACGTCGCTCGTCGAGGTGCACTACATGACGACGTCGTCGTCGTCGTCG 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAAGACGACGTCGTCGTCGTCG 600
DB 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAAGACGACGTCGTCGTCGTCG 600
QY 601 TGAATGGGCGCCCAACATGCAKCGCCAGGCGGTTCCGCTGGTGGCGAGCGGCGCGTGG 660
DB 601 TGAATGGGCGCCCAACATGCAKCGCCAGGCGGTTCCGCTGGTGGCGAGCGGCGCGTGG 660
QY 661 TGGGCACCGGCGATGGAGCTGCGCGCGCGGATCGACGCGCGACGTCGTCGTCGTCGTCG 705
DB 661 TGGGCACCGGCGATGGAGCTGCGCGCGCGGATCGACGCGCGACGTCGTCGTCGTCGTCG 705

RESULT 7
US-09-285-306-9
; Sequence 9, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Drenkow, Jorg
; APPLICANT: Gengeras, Thomas
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700S
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02

```

Query Match	98.6%	Score 695	DB 9	Length 705
Best Local Similarity	98.6%	Pred. No. 2.5e-153		
Matches 695	Conservative 4	Mismatches 6	Indels 0	Gaps 0
Qy	1	CCCAGGACGTGGAGCGCATCACACCGCAGACCCCTGTATCAACATCCGTCCTCGCTCGTGGCGG	60	
Db	1	CCCAGGACGTGGAGCGCATCACACCGCAGACCCCTGTATCAACATCCGTCCTCGTGGCGG	60	
Qy	61	CGATCAAGGAGTCTTCTCGGCACACCGCAGCTGTCCCATGTTTCATGGACACAGAACACCCGC	120	
Db	61	CGATCAAGGAGTCTTCTCGGCACACCGCAGCTGTCCCATGTTTCATGGACACAGAACACCCGC	120	
Qy	121	TGTCGGGGCTCACCAACGCGCGCTGTTCGGCGCTGGGCCCCGGGTGTCTGTCCCGG	180	
Db	121	TGTCGGGGCTCACCAACGCGCGCTGTTCGGCGCTGGGCCCCGGGTGTCTGTCCCGG	180	
Qy	181	AGCGGGCCGGGCTCGAGGTCCGACGCTGTGACCCGTCCCACTACGCGCGGATGTCGCCGA	240	
Db	181	AGCGGGCCGGGCTCGAGGTCCGACGCTGTGACCCGTCCCACTACGCGCGGATGTCGCCGA	240	
Qy	241	TCGAGACCCCGAGGGTCCCAACATCTGATCGGCTCGCTGTCTGATCGGCTCGCTGTATCGCGGG	300	
Db	241	TCGAGACCCCGAGGGTCCCAACATCTGATCGGCTCGCTGTCTGATCGGCTCGCTGTATCGCGGG	300	
Qy	301	TCAACCCGTTCGGGTTTCATCGAGACGCCGTATCCGCAAGGTGGTTCGACGCGTGTCTACCG	360	
Db	301	TCAACCCGTTCGGGTTTCATCGAGACGCCGTATCCGCAAGGTGGTTCGACGCGTGTCTACCG	360	
Qy	361	ACGAGATCCACTACTTCAGCCGCCACGAGGAGGACCCGACGTGGTGGCGCAGGCCCAACT	420	
Db	361	ACGAGATCCACTACTTCAGCCGCCACGAGGAGGACCCGACGTGGTGGCGCAGGCCCAACT	420	
Qy	421	CGCCGATCGACGGCAAGGGCCGGTTTCGCGAGGGCCCGGTGCTGGTTCGCGCAAGCGGG	480	
Db	421	CGCCGATCGACGGCAAGGGCCGGTTTCGCGAGGGCCCGGTGCTGGTTCGCGCAAGCGGG	480	
Qy	481	GCAGGTCGAGTACGTGCCCTTCGTTCGAGGTGGACTACATGGACNTKTCGCCGCCCARA	540	
Db	481	GCAGGTCGAGTACGTGCCCTTCGTTCGAGGTGGACTACATGGACNTKTCGCCGCCCARA	540	
Qy	541	TGGTGTTCGGTGGCCACCGCATGATCCGTTCTTCGAGCAGCAGACGCCAACCGTGGCC	600	
Db	541	TGGTGTTCGGTGGCCACCGCATGATCCGTTCTTCGAGCAGCAGACGCCAACCGTGGCC	600	
Qy	601	TGATGGGCGCCAAATGCAKCGCCAGCGGGTTCGGCTGGTTCGCGAGCGAGNCGCGCGCTGG	660	
Db	601	TGATGGGCGCCAAATGCAKCGCCAGCGGGTTCGGCTGGTTCGCGAGCGAGNCGCGCGCTGG	660	
Qy	661	TGGGCAACCGCATAGGCTGCGCGCGCATTCGACGCGGGACGT	705	
Db	661	TGGGCAACCGCATAGGCTGCGCGCGCATTCGACGCGGGACGT	705	

RESULT 8
US-09-285-306-12
; Sequence 12, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Afymetrix, Inc.

;	TITLE OF INVENTION: Mycobacterial rpoB Sequences
;	FILE REFERENCE: 018547-0185700S
;	CURRENT APPLICATION NUMBER: US/09/285,306A
;	CURRENT FILING DATE: 1999-04-02
;	EARLIER APPLICATION NUMBER: US 60/080,616
;	EARLIER FILING DATE: 1998-04-03
;	NUMBER OF SEQ ID NOS: 181
;	SOFTWARE: FastSeq for Windows Version 3.0
;	SEQ ID NO 12
;	LENGTH: 705
;	TYPE: DNA
;	ORGANISM: Mycobacterium avium
;	US-09-285-306-12
	Query Match 98.6%; Score 695; DB 9; Length 705
	Best Local Similarity 98.6%; Pred. No. 2.5e-153;
	Matches 695; Conservative 4; Mismatches 6; Indels
Qy	1 CCCAGGACGTGAGGCGGATCACACGCGACAGCCCTGATCAACATCCGTCCTCC
Db	1 CCCAGGACGTGAGGCGGATCACACGCGACAGCCCTGATCAACATCCGTCCTCC
Qy	61 CGATCAAGAGGTTCTTCGCGACACAGCCAGCTGTCGCCAGTTTCATTGGACCA
Db	61 CGATCAAGAGGTTCTTCGCGACACAGCCAGCTGTCGCCAGTTTCATTGGACCA
Qy	121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGCGCTGGGCCCCCGGGTGG
Db	121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGCGCTGGGCCCCCGGGTGG
Qy	181 AGCGGGCCGGGCTGGAGTCCGCGAGCTGCACCCGTCGCCATCAGCGCCG
Db	181 AGCGGGCCGGGCTGGAGTCCGCGAGCTGCACCCGTCGCCATCAGCGCCG
Qy	241 TCGAGACCCCGAGGGTCCCACAATCGGTCTGATCGGCTCGCTGTCCGTTG
Db	241 TCGAGACCCCGAGGGTCCCACAATCGGTCTGATCGGCTCGCTGTCCGTTG
Qy	301 TCACCCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGG
Db	301 TCACCCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGG
Qy	361 ACGAGATCCACTACTGTGACCCCGACGAGGAGGACCGCCACGTCGTTGGC
Db	361 ACGAGATCCACTACTGTGACCCCGACGAGGAGGACCGCCACGTCGTTGGC
Qy	421 CGCCGATCGACGCGAAGGGCCGGTTTCGCGAGGCCCGGGTGTGGTCCGG
Db	421 CGCCGATCGACGCAAGAGGGCCGGTTTCGCGAGGGCCCGGGTGTGGTCCGG
Qy	481 GCGAGGTGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGACNTKTC
Db	481 GCGAGGTGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGACGTGTCC
Qy	541 TGGTGTCCGTTGGCCACCCGGATGATCCCGTTTCTTCGAGCACGACGACGC
Db	541 TGGTGTCCGTTGGCCACCCGGATGATCCCGTTTCTTCGAGCACGACGACGC
Qy	601 TGATGGGGCCCAACATGCAKCGCCAGGCGGTTCCGCTGGTGGCAGCGAG
Db	601 TGATGGGGCCCAACATGAGAGCGCCAGGCGGTTCCGCTGGTGGCAGCGAG
Qy	661 TGGCACCGGATGGAGCTGGCGCGCGATCGACGCGGCGAGT 705
Db	661 TGGCACCGGATGGAGCTGGCGCGCGATCGACGCGGCGAGT 705

RESULT 9
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas

```
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-13

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 2.5e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60

Qy 61 CGATCAAGGAGTTCTTCGGCACCAAGCCAGCTGTCCAGTTTCATGACCAAGAACACCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCAAGCCAGCTGTCCAGTTTCATGACCAAGAACACCGC 120

Qy 121 TGTGGGGCTCACCCACAAGCCCGCTGTGGGGCTGGGGCTGGGGCTGGTCTGTCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCCCGCTGTGGGGCTGGGGCTGGGGCTGGTCTGTCCGGG 180

Qy 181 AGCGGGCGGGTGGAGTTCGCGACGTGCAACCGTCCACTACGGCGGATGTGCCGA 240
Db 181 AGCGGGCGGGTGGAGTTCGCGACGTGCAACCGTCCACTACGGCGGATGTGCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTACCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATCGCGGG 300

Qy 301 TCAACCCGTTGCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCAGCGGCTGTACCG 360
Db 301 TCAACCCGTTGCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCAGCGGCTGTACCG 360

Qy 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCACGTGTGGCGCAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCACGTGTGGCGCAGGCCAACT 420

Qy 421 CGCCGATCGAGCGCAAGGGCCGGTTTCGCGAGGCCCGGGTGTGTCGCGCGCAAGCGG 480
Db 421 CGCCGATCGAGCGCAAGGGCCGGTTTCGCGAGGCCCGGGTGTGTCGCGCGCAAGCGG 480

Qy 481 GCGAGTTCGAGTACGTGCTCGTCCGAGTGGACTACATGGAACNTKTCSCCGGCCARA 540
Db 481 GCGAGTTCGAGTACGTGCTCGTCCGAGTGGACTACATGGAACNTKTCSCCGGCCARA 540

Qy 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACCGCAACCGTGGCC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACCGCAACCGTGGCC 600

Qy 601 TGATGGGCGCAACATGCAKCGCCAGGCGGTTCCGCTGGTGGCAGCGGAGCGCGTGG 660
Db 601 TGATGGGCGCAACATGCAKCGCCAGGCGGTTCCGCTGGTGGCAGCGGAGCGCGTGG 660

Qy 661 TGGGACCCGGCATGGAGTTCGCGCGGCGATCGACCGCGGACGT 705
Db 661 TGGGACCCGGCATGGAGTTCGCGCGGCGATCGACCGCGGACGT 705
```

```
RESULT 10
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
```

```
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14
```

```
Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 2.5e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60

Qy 61 CGATCAAGGAGTTCTTCGGCACCAAGCCAGCTGTCCAGTTTCATGACCAAGAACACCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCAAGCCAGCTGTCCAGTTTCATGACCAAGAACACCGC 120

Qy 121 TGTGGGGCTCACCCACAAGCGCCCTGTGGGGCTGGGGCTGGGGCTGGTCTGTCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCCCTGTGGGGCTGGGGCTGGGGCTGGTCTGTCCGGG 180

Qy 181 AGCGGGCGGGTGGAGTTCGCGACGTGCAACCGTCCACTACGGCGGATGTGCCGA 240
Db 181 AGCGGGCGGGTGGAGTTCGCGACGTGCAACCGTCCACTACGGCGGATGTGCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTACCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATCGCGGG 300

Qy 301 TCAACCCGTTGCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCAGCGGCTGTACCG 360
Db 301 TCAACCCGTTGCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCAGCGGCTGTACCG 360

Qy 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCACGTGTGGCGCAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCACGTGTGGCGCAGGCCAACT 420

Qy 421 CGCCGATCGAGCGCAAGGGCCGGTTTCGCGAGGCCCGGGTGTGTCGCGCGCAAGCGG 480
Db 421 CGCCGATCGAGCGCAAGGGCCGGTTTCGCGAGGCCCGGGTGTGTCGCGCGCAAGCGG 480

Qy 481 GCGAGTTCGAGTACGTGCTCGTCCGAGTGGACTACATGGAACNTKTCSCCGGCCARA 540
Db 481 GCGAGTTCGAGTACGTGCTCGTCCGAGTGGACTACATGGAACNTKTCSCCGGCCARA 540

Qy 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACCGCAACCGTGGCC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACCGCAACCGTGGCC 600

Qy 601 TGATGGGCGCAACATGCAKCGCCAGGCGGTTCCGCTGGTGGCAGCGGAGCGCGTGG 660
Db 601 TGATGGGCGCAACATGCAKCGCCAGGCGGTTCCGCTGGTGGCAGCGGAGCGCGTGG 660

Qy 661 TGGGACCCGGCATGGAGTTCGCGCGGCGATCGACCGCGGACGT 705
Db 661 TGGGACCCGGCATGGAGTTCGCGCGGCGATCGACCGCGGACGT 705
```

```
RESULT 11
US-09-285-306-16
```

; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-16

```
Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 2.5e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCCTCCGTCGTGGCGG 60
Db 1 CCCAGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60

QY 61 CGATCAAGAGGTTCTTGGCACCAGCCAGCTGTCCAGTTTCATGGACAGACAACCCGCG 120
Db 61 CGATCAAGAGGTTCTTGGCACCAGCCAGCTGTCCAGTTTCATGGACAGACAACCCGCG 120

QY 121 TGTGGGGCTCAACCAAGCCCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCAACCAAGCCCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCCGGG 180

QY 181 AGCGGGCGGGTGGAGGTCGGGAGTCGACCGCTCCACTACCGCGCGGATGTCCCGGA 240
Db 181 AGCGGGCGGGTGGAGGTCGGGAGTCGACCGCTCCACTACCGCGCGGATGTCCCGGA 240

QY 241 TCGAGACCCCGAGGGTCCAAACATCGGTCTGATCGGTCTGGTCTGGTGTATGCGGGG 300
Db 241 TCGAGACCCCGAGGGTCCAAACATCGGTCTGATCGGTCTGGTCTGGTGTATGCGGGG 300

QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGTGTCGACCGCGTGGTCAACG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGTGTCGACCGCGTGGTCAACG 360

QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGGCACGTCGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGGCACGTCGTGGCGAGGCCAACT 420

QY 421 CGCCGATCGACGGCAAGGCGCGTTTCGCGAGGCGCGGTCTGGTCTGGCGCAAGGCGG 480
Db 421 CGCCGATCGACGGCAAGGCGCGTTTCGCGAGGCGCGGTCTGGTCTGGCGCAAGGCGG 480

QY 481 GCGAGGTCGAGTACGTCGTCCTCGTCCGAGGTGGACTACATGACGACGTCGCGCGCCARA 540
Db 481 GCGAGGTCGAGTACGTCGTCCTCGTCCGAGGTGGACTACATGACGACGTCGCGCGCCARA 540

QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGACGCAACCGTGGCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGACGCAACCGTGGCC 600

QY 601 TGATGGGCGCCAAATGCAKCGCCAGGCGGTTTCGCTGGTGGCGAGCGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGCAKCGCCAGGCGGTTTCGCTGGTGGCGAGCGGCGCGCTGG 660

QY 661 TGGGCAACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db 661 TGGGCAACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGACGT 705
```

RESULT 12
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

```
Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 2.5e-153;
Matches 695; Conservative 4; Mismatches 5; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCCTCCGTCGTGGCGG 60
Db 1 CCCAGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60

QY 61 CGATCAAGAGGTTCTTGGGCAACCGCAGCTGTCCAGTTTCATGGACAGACAACCCGCG 120
Db 61 CGATCAAGAGGTTCTTGGGCAACCGCAGCTGTCCAGTTTCATGGACAGACAACCCGCG 120

QY 121 TGTGGGGCTCAACCAAGCGCCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCAACCAAGCGCCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCCGGG 180

QY 181 AGCGGGCGGGTGGAGTTCGGAGTTCGCGACGTCGACCGCTCCACTACCGCGCGGATGTCCCGGA 240
Db 181 AGCGGGCGGGTGGAGTTCGGAGTTCGCGACGTCGACCGCTCCACTACCGCGCGGATGTCCCGGA 240

QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTGGTCTGGTGTATGCGGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTGGTCTGGTGTATGCGGGG 300

QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGTGTCGACCGCGTGGTCAACG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGTGTCGACCGCGTGGTCAACG 360

QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGGCACGTCGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGGCACGTCGTGGCGAGGCCAACT 420

QY 421 CGCCGATCGACGGCAAGGCGCGTTTCGCGAGGCGCGGTCTGGTCTGGCGCAAGGCGG 480
Db 421 CGCCGATCGACGGCAAGGCGCGTTTCGCGAGGCGCGGTCTGGTCTGGCGCAAGGCGG 480

QY 481 GCGAGGTCGAGTACGTCGTCCTCGTCCGAGGTGGACTACATGACGACGTCGCGCGCCARA 540
Db 481 GCGAGGTCGAGTACGTCGTCCTCGTCCGAGGTGGACTACATGACGACGTCGCGCGCCARA 540

QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGACGCAACCGTGGCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGACGCAACCGTGGCC 600

QY 601 TGATGGGCGCCAAATGCAKCGCCAGGCGGTTTCGCTGGTGGCGAGCGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGCAKCGCCAGGCGGTTTCGCTGGTGGCGAGCGGCGCGCTGG 660

QY 661 TGGGCAACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db 661 TGGGCAACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGACGT 705
```

```
RESULT 13
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 2.5e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGCGATCACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60
Db 1 CCCAGGAGCTGGAGCGATCACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60

Qy 61 CGATCAAGAGGATCTTCCGGCACCGCAGCTGTCCAGTTTCATGGACCAACACCGCG 120
Db 61 CGATCAAGAGGATCTTCCGGCACCGCAGCTGTCCAGTTTCATGGACCAACACCGCG 120

Qy 121 TGTGCGGGCTCACCCACAAGCCGCTGTGCGGCTGGGCGCGGTGCTGTCCCGGG 180
Db 121 TGTGCGGGCTCACCCACAAGCCGCTGTGCGGCTGGGCGCGGTGCTGTCCCGGG 180

Qy 181 AGCGGCGCGGCTGGAGTCCGCGACGTGACCCGTCCCACTACGCGCGGATGCCCCGA 240
Db 181 AGCGGCGCGGCTGGAGTCCGCGACGTGACCCGTCCCACTACGCGCGGATGCCCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCTGTACGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCTGTACGCGGG 300

Qy 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGCTCGACGGCTGTACCG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGCTCGACGGCTGTACCG 360

Qy 361 ACGAGATCCACTACTGACCCCGCAGAGGAGGACCGCACGTGTTGGCGCAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCCCGCAGAGGAGGACCGCACGTGTTGGCGCAGGCCAACT 420

Qy 421 CGCCGATCGACGACAAAGGCGCGTTCGCGGAGGCGCGGCTGCTGGTCCGCGCAAGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTCGCGGAGGCGCGGCTGCTGGTCCGCGCAAGCGG 480

Qy 481 GCGAGGTCGAGTACGTGCGCTTCGTCGAGAGGAGGACCGCACGTGTTGGCGCAGGCCAA 540
Db 481 GCGAGGTCGAGTACGTGCGCTTCGTCGAGAGGAGGACCGCACGTGTTGGCGCAGGCCAA 540

Qy 541 TGCTGTGCTGGTGGCACCGGATGATCCCGTTCTTCGAGCAGACGACGCGCAACCGTCC 600
Db 541 TGCTGTGCTGGTGGCACCGGATGATCCCGTTCTTCGAGCAGACGACGCGCAACCGTCC 600

Qy 601 TGATGGGCGCCAAATGCAKCGCCAGGCGGTTCCGCTGTCGCGAGCGGAGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGCAKCGCCAGGCGGTTCCGCTGTCGCGAGCGGAGCGCGCTGG 660

Qy 661 TGGGACCCGGCATGGAGCTGCGCGCGCGATCGAGCGGCGACGT 705
```

```
Db 661 TGGCACCCGGCATGGAGCTGCGCGCGCGATCGACGCGCGACGT 705

RESULT 14
US-09-285-306-11
; Sequence 11, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-11

Query Match      98.3%; Score 693; DB 9; Length 705;
Best Local Similarity 98.3%; Pred. No. 7.2e-153;
Matches 693; Conservative 4; Mismatches 8; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCTCGTGGCGG 60

Qy 61 CGATCAAGAGGATCTTTCGGCACCGCAGCTGTCCAGTTTCATGGACCAACACCGCG 120
Db 61 CGATCAAGAGGATCTTTCGGCACCGCAGCTGTCCAGTTTCATGGACCAACACCGCG 120

Qy 121 TGTGCGGGCTCACCCACAAGCCGCTGTGCGGCTGGGCGCGGTGCTGTCCCGGG 180
Db 121 TGTGCGGGCTCACCCACAAGCCGCTGTGCGGCTGGGCGCGGTGCTGTCCCGGG 180

Qy 181 AGCGGCGCGGCTGGAGTCCGCGACGTGACCCGTCCCACTACGCGCGGATGTTGCCGA 240
Db 181 AGCGGCGCGGCTGGAGTCCGCGACGTGACCCGTCCCACTACGCGCGGATGTTGCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCTGTACGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCTGTACGCGGG 300

Qy 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGCTCGACGGCTGTACCG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGCTCGACGGCTGTACCG 360

Qy 361 ACGAGATCCACTACTGACCCCGCAGAGGAGGACCGCACGTGTTGGCGCAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCCCGCAGAGGAGGACCGCACGTGTTGGCGCAGGCCAACT 420

Qy 421 CGCCGATCGACGACAAAGGCGCGTTCGCGGAGGCGCGGCTGCTGGTCCGCGCAAGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTCGCGGAGGCGCGGCTGCTGGTCCGCGCAAGCGG 480

Qy 481 GCGAGGTCGAGTACGTGCGCTTCGTCGAGAGGAGGACCGCACGTGTTGGCGCAGGCCAA 540
Db 481 GCGAGGTCGAGTACGTGCGCTTCGTCGAGAGGAGGACCGCACGTGTTGGCGCAGGCCAA 540

Qy 481 GCGAGGTCGAGTACGTGCGCTTCGTCGAGAGGAGGACCGCACGTGTTGGCGCAGGCCAA 540
Db 481 GCGAGGTCGAGTACGTGCGCTTCGTCGAGAGGAGGACCGCACGTGTTGGCGCAGGCCAA 540
```


This Page Blank (uspio)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds
(without alignments)
11150.034 Million cell updates/sec

Title: US-09-285-306-4
Perfect score: 705
Sequence: 1 cccagcgctggagcgatc.....ggcgatcgagcgggcgacgt 705

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents NA:
1: /cgn2_6/ptodata/1/ina/5A.COMB.seq:
2: /cgn2_6/ptodata/1/ina/5B.COMB.seq:
3: /cgn2_6/ptodata/1/ina/6A.COMB.seq:
4: /cgn2_6/ptodata/1/ina/6B.COMB.seq:
5: /cgn2_6/ptodata/1/ina/PCTUS.COMB.seq:
6: /cgn2_6/ptodata/1/ina/backfiles1.seq:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	2	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	3	US-08-520-946-135
11	530.4	75.2	620	3	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	3	US-08-520-946-136
19	528.8	75.0	620	3	US-08-520-946-137
20	528.8	75.0	620	3	US-08-520-946-139
21	528.8	75.0	620	3	US-08-520-946-140
22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	411	58.3	5099	4	US-09-887-052-1

ALIGNMENTS

RESULT 1

US-08-797-812-24
; Sequence 24, Application US/08797812
; Patent No. 6228575
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas A.
; APPLICANT: Mack, David
; APPLICANT: Chee, Mark S.
; APPLICANT: Berno, Anthony J.
; APPLICANT: Stryer, Lubert
; APPLICANT: Ghandour, Ghassan
; APPLICANT: Wang, Ching
; TITLE OF INVENTION: Chip-Based Species Identification and
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/797,812
FILING DATE: 07-FEB-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/017,765
FILING DATE: 15-MAY-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/629,031
FILING DATE: 08-APR-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/012,631
FILING DATE: 01-MAR-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/011,339
FILING DATE: 08-FEB-1996
ATTORNEY/AGENT INFORMATION:
NAME: Fitts, Renee A.
REGISTRATION NUMBER: 35,136
REFERENCE/DOCKET NUMBER: 16528X-018550
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-326-2400
TELEFAX: 415-326-2422

28 409.4 58.1 5099 4 US-09-887-052-3 Sequence 3, Appli
29 409.4 58.1 5099 4 US-09-887-052-5 Sequence 5, Appli
30 402 4227 4 US-09-902-540-8919 Sequence 8919, Ap
c 31 402 9367 4 US-09-902-540-951 Sequence 951, App
c 32 371.2 52.7 4074 4 US-09-252-991A-4737 Sequence 4737, Ap
33 371.2 52.7 4092 4 US-09-252-991A-4771 Sequence 4771, Ap
34 337.2 47.8 4083 4 US-09-489-039A-22 Sequence 22, Appl
c 35 337.2 47.8 4206 4 US-09-489-039A-30 Sequence 30, Appl
36 293.4 41.6 432 2 US-08-313-185-59 Sequence 59, Appl
37 293.4 41.6 432 3 US-08-082-614A-59 Sequence 59, Appl
38 286.2 40.6 324 3 US-08-750-088A-36 Sequence 36, Appl
39 286.2 40.6 324 4 US-09-722-319-36 Sequence 36, Appl
40 265.2 37.6 2964 4 US-09-540-236-1097 Sequence 1097, Ap
41 265.2 37.6 4167 4 US-09-543-681A-3177 Sequence 3177, Ap
42 285.2 37.6 31063 4 US-09-596-002-20 Sequence 20, Appl
43 255.6 36.3 319 3 US-08-750-088A-35 Sequence 35, Appl
44 255.6 36.3 319 4 US-09-722-319-35 Sequence 35, Appl
c 45 249.8 35.4 11935 4 US-09-634-238-401 Sequence 401, App

; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 706 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-797-812-24

```
Query Match      86.6%; Score 610.6; DB 3; Length 706;
Best Local Similarity 91.6%; Pred. No. 1.1e-118;
Matches 646; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGCATCACACCGCAGACCCCTGATCAACATCCGTCACAGTCGTGGCGG 60
Db 2 CCCAGGACGTGGAGCGCATCACACCGCAGACGTTGATCAACATCCGCGCGTGTGCGCG 61

Qy 61 CGATCAAGGAGTTCTTCGGCACACGACGCTGTCGCCGCTGGGCGCGGTGCTGTCCCGGG 120
Db 62 CGATCAAGGAGTTCTTCGGCACACGACGCTGAGCCAAATTCATGGACAGAAACCCCGC 121

Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTGCGGCTGGGCGCGGTGCTGTCCCGGG 180
Db 122 TGTGGGGCTTACCCACAAGCGCGCTGTGCGGCTGGGCGCGGTGCTGTCAAGTG 181

Qy 181 AGCGGGCGGGCTGGAGTCCCGCAGCTGACACCGTCCCACTACGCGCGGATGTGCCCGA 240
Db 182 AGCGTCCGGGCTGGAGTCCCGCAGCTGACACCGTCCCACTACGCGCGGATGTGCCCGA 241

Qy 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCTGCTGCTGCTGCTG 300
Db 242 TCGAAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGCTGCTGCTGCTGCTGCTG 301

Qy 301 TCACACCGTTCGGGTTTCATCGAGAGCGGCTACCCAGAGTGGTGCAGCGGCTGTACCG 360
Db 302 TCACACCGTTCGGGTTTCATCGAAAACGCGCTACCCAGAGTGGTGCAGCGGCTGTGCTG 361

Qy 361 ACAGAGTCCACTACTGACCGCCGACGAGGAGGACCGCACGTCGTCGCGCAGGCCAACT 420
Db 362 ACAGAGTCCGTACTGACCGCCGACGAGGAGGACCGCACGTCGTCGCGCAGGCCAACT 421

Qy 421 CGCGCATCGACGACAAGGGCGGTTTCGCGGAGGCGCGGCTGCTGCTGCTGCTGCTGCTG 480
Db 422 CGCGCATCGATGCGGACGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 481

Qy 481 GCGAGGTCGAGTACGTCCTCGTCGAGTGGACTACATGGACGTCGCGCGCGCAGA 540
Db 482 GCGAGGTCGAGTACGTCCTCGTCGAGTGGACTACATGGACGTCGCGCGCGCAGA 541

Qy 541 TGGTGTGCGTGGCCACCGCATGATCCCGTTCTTCGAGCAGCAGCAGCCAAACCGTGCCC 600
Db 542 TGGTGTGCGTGGCCACCGCATGATTCCTTCTTGGAGCAGCAGCAGCCAAACCGTGCCC 601

Qy 601 TGATGGCGCCAAACATGACGCGCAGCGGTTCCGCTGCTGCTGCTGCTGCTGCTGCTG 660
Db 602 TCATGGGGGAAAACATGACGCGCAGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTG 661

Qy 661 TGGCACCGCATGGAGCTGCGCGCGGATCGACGCGGACGCT 705
Db 662 TGGCACCGGATGGAGCTGCGCGCGGATCGACGCGGACGCT 706
```

RESULT 2
US-09-103-840A-2
; Sequence 2, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS

; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 4403765
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; FEATURE:
; OTHER INFORMATION: CDC 1551
; OTHER INFORMATION: "n" bases at various positions throughout the sequence
; OTHER INFORMATION: represent a, t, c or g
US-09-103-840A-2

```
Query Match      85.5%; Score 603; DB 3; Length 4403765;
Best Local Similarity 91.4%; Pred. No. 1.2e-116;
Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCACAGTCGTGGCGG 60
Db 762963 CCCAGGACGTGGAGGCGATCACACCGCAGACGTTGATCAACATCCGCGCGTGTGCGCG 763022

Qy 61 CGATCAAGGAGTTCTTCGGCACACGACGCTGTCGCCAGTTCATGGACAGAAACCCCGC 120
Db 763023 CGATCAAGGAGTTCTTCGGCACACGACGCTGAGCCAAATTCATGGACAGAAACCCCGC 763082

Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTGCGGCTGGGCGCGGTGCTGTCCCGGG 180
Db 763083 TGTGGGGGTTGACCCACAAGCGCGCTGTGCGGCTGGGCGCGGTGCTGTACAGTG 763142

Qy 181 AGCGGGCGGGCTGGAGTCCCGCAGCTGCAACCGTCCCACTACGCGCGGATGTGCCCGA 240
Db 763143 AGCGTCCGGGCTGGAGTCCCGCAGCTGCAACCGTCCCACTACGCGCGGATGTGCCCGA 763202

Qy 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCTGCTGCTGCTGCTG 300
Db 763203 TCGAAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGCTGCTGCTGCTGCTGCTG 763262

Qy 301 TCACACCGTTCGGGTTTCATCGAGAGCGCGTACCGCAGAGTGGTGCAGCGGCTGTACCG 360
Db 763263 TCACACCGTTCGGGTTTCATCGAAAACGCGCTACCGCAGAGTGGTGCAGCGGCTGTGCTG 763322

Qy 361 ACAGAGTCCACTACTGACCGCCGACGAGGAGGACCGCCACGTCGTCGCGCAGGCCAACT 420
Db 763323 ACAGAGTCCGTACTGACCGCCGACGAGGAGGACCGCCACGTCGTCGCGCAGGCCAACT 763382

Qy 421 CGCGCATCGACGACAAGGGCGGTTTCGCGGAGGCGCGGCTGCTGCTGCTGCTGCTGCTG 480
Db 763383 CGCGCATCGATGCGGACGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 763442

Qy 481 GCGAGGTCGAGTACGTCCTCGTCGAGTGGACTACATGGACGTCGCGCGCGCAGA 540
Db 763443 GCGAGGTCGAGTACGTCCTCGTCGAGTGGACTACATGGACGTCGCGCGCGCAGA 763502

Qy 541 TGGTGTGCGTGGCCACCGCATGATCCCGTTCTTCGAGCAGCAGCAGCCAAACCGTGCCC 600
Db 763503 TGGTGTGCGTGGCCACCGCATGATTCCTTCTTGGAGCAGCAGCAGCCAAACCGTGCCC 763562

Qy 601 TGATGGCGCCAAACATGACGCGCAGCGGTTCCGCTGCTGCTGCTGCTGCTGCTGCTG 660
Db 763563 TCATGGGGGAAAACATGACGCGCAGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTG 763622

Qy 661 TGGCACCGCATGGAGCTGCGCGCGGATCGACGCGG 699
Db 763623 TGGCACCCGGATGGAGCTGCGCGCGGATCGACGCGG 763661
```

RESULT 3
US-09-103-840A-1
; Sequence 1, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:

```
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; TYPE: DNA
; LENGTH: 4411529
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.4%; Pred. No. 1.2e-116; Mismatches 60; Indels 0; Gaps 0;
Matches 639; Conservative 0;

QY 1 CCCAGGACGTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
DB 761003 CCCAGGACGTGGAGGCGATCACACGCGAGACCTGATCAACATCCGTCCAGTCTGGCGG 761062

QY 61 CGATCAAGAGGTTCTTCCGACACGACGCTGTCCAGTTTCATGACGAGCAACACCCGC 120
DB 761063 CGATCAAGAGGTTCTTCCGACACGACGCTGTCCAGTTTCATGACGAGCAACACCCGC 761122

QY 121 TGTCCGGGCTACCCACAGCGCGCTGTCCGGCTGGCCGGGTCTGTCTCCCGG 180
DB 761123 TGTCCGGGCTACCCACAGCGCGCTGTCCGGCTGGCCGGGTCTGTCTCCCGG 761182

QY 181 AGCGGGCGGGTGGAGTTCGCGACGCTGACCCCTGCCACTACGCGCGGATGTCCCGA 240
DB 761183 AGCGGGCGGGTGGAGTTCGCGACGCTGACCCCTGCCACTACGCGCGGATGTCCCGA 761242

QY 241 TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGTCTGTGCGGTATGCGCGG 300
DB 761243 TCGAAGCCCTGAGGGGCGCAACATCGTCTGATCGGTCTGTGCGGTATGCGCGG 761302

QY 301 TCAACCCGTTCCGGTTTCATCGAGAGCGCTGACCGCAAGTGTGACGCGGTGTACCG 360
DB 761303 TCAACCCGTTCCGGTTTCATCGAAGCCGCTACCGCAAGTGTGACGCGGTGTACCG 761362

QY 361 AGGAGTCCACTACCTGACCGCGCGACGAGGAGCGCCACGCTGTGGCGAGGCAACT 420
DB 761363 AGGAGTCCACTACCTGACCGCGCGACGAGGAGCGCCACGCTGTGGCGAGGCAACT 761422

QY 421 CGCCGATCGACGACAGGCGCGTTCGCGGAGCGCGGTGTGTGTCGCGCGCAAGGCGG 480
DB 761423 CGCCGATCGATCGGACGCTGCTTCTGTCGAGCGCGGTGTGTGTCGCGCGCAAGGCGG 761482

QY 481 GCGAGTTCGAGTACGTCCTCGTCCGAGGTGACTACATGACGCTGTGCGCGCGCAGA 540
DB 761483 GCGAGTTCGAGTACGTCCTCGTCCGAGGTGACTACATGACGCTGTGCGCGCGCAGA 761542

QY 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCTGAGCAGCAGCAGCAGCGTGGCC 600
DB 761543 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCTGAGCAGCAGCAGCAGCGTGGCC 761602

QY 601 TGATGGGCGCAACATGACGCGCGAGGCGTTCCGCTGTGTGCGAGCGAGGCGCGCTGG 660
DB 761603 TCATGGGCGCAACATGACGCGCGAGGCGTTCCGCTGTGTGCGAGCGAGGCGCGCTGG 761662

QY 661 TGGGACCGGCGATGAGCTGTGCGCGCGCGATCGACGCGG 699
DB 761663 TGGGACCGGCGATGAGCTGTGCGCGCGCGATCGACGCGG 761701

RESULT 4
US-08-313-185-57
```

```
; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Zhang, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-313-185-57

Query Match      79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.1e-107;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
DB 1124 CCCAGGACGTGGAGGCGATCACACGCGAGACCGCTGATCAATATCCGTCCGTGGTGGCGG 1183

QY 61 CGATCAAGAGTTCCTTCCGACACGACCGAGCTGTCCCAGTTTCATGACGACGACACCCGC 120
DB 1184 CTATCAAGAGTTCCTTCCGACACGACCGAGCTGTCCAGTTTCATGATCAGAACCAACCTC 1243

QY 121 TGTCCGGGCTCACCCACAAAGCGCGCTGTCCGGCGCTGGGGCCCGGTCTGTCTCCCGG 180
DB 1244 TGTCCGGGCTCACCCACAAAGCGCGCTGTCCGGCGCTGGGGCCCGGTCTGTCTCCCGG 1303

QY 181 AGCGGGCGGGCTGGAGTTCGCGACGCTGCGACCGCTGCCACTACGCGCGGATGTCCCGA 240
DB 1304 AGCGTCCGGGCTAGAGGTCCGTGACGCTGACCCCTTCGCACTACGCGCGGATGTCCCGA 1363

QY 241 TCGAGACCCCGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTCTCGGTATGCGCGG 300
DB 1364 TCGAGACTCCCGAGGCGCGCAACATAGGTCTGATCGGTCTTATTTGTCGGTGTACGCGG 1423

QY 301 TCAACCCGTTCCGGTTTCATTCGAGACGCGGTACCGCAAGTGTGTGACGCGGTGTACCG 360
DB 1424 TCAACCCGTTCCGGTTTCATTCGAAACACCGGTACCGCAAGTGTGTGACGCGGTGTACCG 1483
```

```
Qy 361 ACGAGATCCACTACTGACCGCCGACGAGGAGGACCGCCAACTGCTGGTGGCGAGGCCAACT 420
Db 1484 ACGAGATCGAATACTTGACCGCTGACGAGGAGGAGACCGCCATGTCGTGGCGCAGGCCAACT 1543
Qy 421 CGCCGATCGACGACAAGGGCGGTTCGCGGAGGCGCCGGGTGCTGTCGCCCGCAGAGCGG 480
Db 1544 CGCCGATCGACGAGGCGCGGTTCCTCGAGCGCGGTGTTGGGTGCGCGCAGAGCGG 1603
Qy 481 GCGAGGTGAGTACGTGCTGCTCGGAGGTGGACTACATGAGCTGTCGCGCGCCGACAGA 540
Db 1604 GCGAGGTGAGTACGTGCTGCTCGGAGGTGGATTACATGAGTCTTCGCCACGCCAGA 1663
Qy 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGACGCCAACCGTGGCC 600
Db 1664 TGGTGTGGTGGCCACCGATGATTCGTTCTTGACACGACGACGCCAACCGTGGCC 1723
Qy 601 TGATGGGCGCAACATGACGCGCCAGGCGGTTCGCTGGTGGCAGCAGGCGCGGTGG 660
Db 1724 TGATGGGCGCTAACATGACGCGCCAAAGCGGTTCGTTGGTGGCAGCAGCAGCGTGG 1783
Qy 661 TGGGACCGCGATGAGCTGCGCGCGCGATCGAGCGG 699
Db 1784 TGGGTACCGGTATGAGTTGCGCGCGCCATCGAGCGTG 1822
```

RESULT 5

```
US-09-082-614A-57
; Sequence 57, Application US/09082614A
; Patent No. 6124098
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/082,614A
; FILING DATE:
```

CLASSIFICATION:

```
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/313,185
; FILING DATE: 12-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
```

```
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-09-082-614A-57
```

Query Match 79.2%; Score 558.2; DB 3; Length 3447;

Best Local Similarity 87.4%; Pred. No. 1.1e-107;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

```
Qy 1 CCCAGGACGTGGAGGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60
Db 1124 CCCAGGACGTGGAGGGCGATCACACCGCAGACCGCTGATCAATATCCGTCCGTGGTGCCTG 1183
Qy 61 CGATCAAGGAGTCTTTCGGCACACGACGCTGCCAGTCTCCAGTTCATGGAACAGAACCCCGC 120
Db 1184 CTATCAAGGAGTCTTTCGGCACACGACGCTGCCAGTCTCCAGTTCATGGAACAGAACCCCTC 1243
Qy 121 TGTGGGGGTTCACCCACAAGGGCGCTGTCGGGGCTGGGGCCCGGGTGGTCTGTCCCGGG 180
Db 1244 TGTGGGGCTGACCCACAAGGGCGCGCTGTCGGGGCTGGGGCCCGGGTGGTCTGTCCGCTG 1303
Qy 181 AGCGGGCGGGCTGGAGGTCCGCGACGTGCACCCGTCCTCCACTACGGCCGGATGTGCCGA 240
Db 1304 AGCTGCCGGGTAGAGTTCGTGACGTGACCTTCGCACTACGGCCGGATGTGCCGA 1363
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATTCGGTCTCGTCTCGGTGTATGCGCGGG 300
Db 1364 TCGAGACTCCGGAGGGCCCGAATAGTCTGATCGGTTCATTCGTGCTGATCGCGGG 1423
Qy 301 TCAACCCGTTCGGTTTCATCGAGACGGCTACCGCAAGGTGGTTCGACGGGGTGTCTACCG 360
Db 1424 TCAACCCCTTCGGTTTCATCGAACAACCGTACCGCAAAAGTGGTTGACGGGTGTGGTCAAG 1483
Qy 361 ACGAGATCCACTACCTGACCGCGCAGCAGGAGGAGCCCGACGTGTTGGCGCAGGCCAACT 420
Db 1484 ACGAGATCGAATCTTGACCGCTGACGAGAGAGACCCCATCTGCTGGCGCAGGCCAACT 1543
Qy 421 CGCGATCGACGACAAGGGCGGTTCGCGAGGCGCCGGGTGCTGGTCCGCGCAGAGCGG 480
Db 1544 CGCGATCGACGAGGCGCGCGCTTCCTCGAGCGCGCGTGTGGGTGCGCGCAGAGCGG 1603
Qy 481 GCGAGGTGAGTACGTGCTCCCTCGTCCGAGGTGAGTACATGAGGAGTCTGCGCGCGCCAGA 540
Db 1604 GCGAGGTGAGTACGTGCTCCCTCGTCCGAGGTGAGTACATGAGGAGTCTGCGCACGCCAGA 1663
Qy 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTTCGAGCAGCAGCAGCCAAACCGTGCCT 600
Db 1664 TGGTGTGCGTGGCCACGACGATGATTCGGTTCCTTGAGCAGCAGCAGCCAAACCGTGCCT 1723
Qy 601 TGATGGGCGCCAAACATCGACGGCGCAGCGGTTCGCTGGTGGCAGAGGCGCGGTGG 660
Db 1724 TGATGGGCGCTAACATCGACGGCCAAAGCGGTTCGTTGGTGGCAGCAGCAGCGTGG 1783
Qy 661 TGGCACCGGATGAGCTGCGCGCGCGATCGAGCGG 699
Db 1784 TGGGTACCGGTATGAGTTGCGCGCGCCATCGAGCGTG 1822
```

RESULT 6

```
US-08-250-030-1
; Sequence 1, Application US/08250030
; Patent No. 5643723
; GENERAL INFORMATION:
; APPLICANT: Persing, David H.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in
; TITLE OF INVENTION: Clinical Specimens
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
```

; ZIP: 55402
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/250,030
 ; FILING DATE: 26-MAY-1994
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Muetting, Ann M.
 ; REGISTRATION NUMBER: 33,977
 ; REFERENCE/DOCKET NUMBER: 150.105US1
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 612-339-0331
 ; TELEFAX: 612-339-3061
 ; INFORMATION FOR SEQ ID NO: 1:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 970 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: DNA
 ; US-08-250-030-1

Query Match 76.7%; Score 540.4; DB 1; Length 970;
 Best Local Similarity 91.1%; Pred. No. 5e-104;
 Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;
 QY 1 CCCAGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCACGTCGTCGGCGG 60
 Db 341 CCCAGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCGTCGGCGG 400
 QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACCAAGCAACACCGC 120
 Db 401 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACCAAGCAACACCGC 460
 QY 121 TGTGGGGCTACCCACAGGCGCCCTGTGCGGCGCTGGGCGCGGTGTGTCTCCCGG 180
 Db 461 TGTGGGGTTGACCCACAGGCGCCAGTGTGCGGCGTGGGCGCGGTGTGTCTCACGTG 520
 QY 181 AGCGGGCGGGCTGAGGTCCGAGCTGCGAGCTGCGACCCCTGCGCTCCACTACGCGCGGATGCGCGA 240
 Db 521 AGCGTGGCGGCTGGAGGAGCGAGCTGCGACCCCTGCGCTCCACTACGCGCGGATGCGCGA 580
 QY 241 TCGAGACCCCGAGGCTCCCAACATCGGTCGTGATCGGTCGCTGTGCGGTGTATGCGCGG 300
 Db 581 TCGAACCCTTGGAGGCGCCCAACATCGGTCGTGATCGGTCGCTGTGCGGTGTATGCGCGG 640
 QY 301 TCAACCCGTTGGGTTTCATCGAGACGCGCTACCGCAAGGTGTGCGAGCGGTGTGTCACCG 360
 Db 641 TCAACCCGTTGGGTTTCATCGAAGCGCGCTACCGCAAGGTGTGTCACCGGTGTGTCACCG 700
 QY 361 ACGAGATCCACTACCTGACCGCGGAGGAGCGGAGCGGAGCGGAGCGGAGCGGAGCGGAGCGG 420
 Db 701 ACGAGATCGTGTGACCTGACCGCGGAGGAGCGGAGCGGAGCGGAGCGGAGCGGAGCGGAG 760
 QY 421 CGCCCATCGACGACAAAGGCGCGGTTTCGGGAGGCGCGGCTGTGTCGCGCGCGCAAGGCGG 480
 Db 761 CGCCCATCGATGCGGAGCGGTCGCTTCGTGCGAGCGCGGCTGTGTCGCGCGCGCAAGGCGG 820
 QY 481 GCGAGGTGAGTACGTCGCTTCGTGCGAGGTGGAATAATGAGAGTGTGCGCGCGCGCAGA 540
 Db 821 GCGAGGTGAGTACGTCGCTTCGTGCGAGGTGGAATAATGAGAGTGTGCGCGCGCGCAGA 880
 QY 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTTCCTGAGCAGCAGCAGCAGCAGCAGCAGCAGC 600
 Db 881 TGGTGTGCGTGGCCACCGCGATGATTCCTTCCTGAGCAGCAGCAGCAGCAGCAGCAGCAGC 940
 QY 601 TGATGGGCGCCAAACATGACGCGCCAGGCGG 630
 Db 941 TCATGGGCGCCAAACATGACGCGCCAGGCGG 970

RESULT 7
 PCT-US95-06790-1
 ; Sequence 1, Application PC/TUS9506790
 ; GENERAL INFORMATION:
 ; APPLICANT: Mayo Foundation for Medical Education and Research
 ; APPLICANT: and Hoffmann-La Roche Inc.
 ; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
 ; TITLE OF INVENTION: Resistance to Rifampin
 ; NUMBER OF SEQUENCES: 15
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Schwegman, Lundberg & Woessner
 ; STREET: 3500 IDS Center
 ; CITY: Minneapolis
 ; STATE: MN
 ; COUNTRY: USA
 ; ZIP: 55402
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: PCT/US95/06790
 ; FILING DATE: 26-MAY-1995
 ; CLASSIFICATION:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Raasch, Kevin W.
 ; REGISTRATION NUMBER: 35,651
 ; REFERENCE/DOCKET NUMBER: 150.105WO1
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 612-339-0331
 ; TELEFAX: 612-339-3061
 ; INFORMATION FOR SEQ ID NO: 1:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 970 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: DNA
 ; PCT-US95-06790-1

Query Match 76.7%; Score 540.4; DB 5; Length 970;
 Best Local Similarity 91.1%; Pred. No. 5e-104;
 Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;
 QY 1 CCCAGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCACGTCGTCGGCGG 60
 Db 341 CCCAGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCGTCGGCGG 400
 QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACCAAGCAACACCGC 120
 Db 401 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGACCAAGCAACACCGC 460
 QY 121 TGTGGGGCTACCCACAGGCGCCCTGTGCGGCGCTGGGCGCGGTGTGTCTCCCGG 180
 Db 461 TGTGGGGTTGACCCACAGGCGCCAGTGTGCGGCGTGGGCGCGGTGTGTCTCACGTG 520
 QY 181 AGCGGGCGGGCTGAGGTCCGAGCTGCGAGCTGCGACCCCTGCGCTCCACTACGCGCGGATGCGCGA 240
 Db 521 AGCGTGGCGGCTGGAGGAGCGGAGCGGAGCTGCGACCCCTGCGCTCCACTACGCGCGGATGCGCGA 580
 QY 241 TCGAGACCCCGAGGCTCCCAACATCGGTCGTGATCGGTCGCTGTGCGGTGTATGCGCGG 300
 Db 581 TCGAACCCTTGGAGGCGCCCAACATCGGTCGTGATCGGTCGCTGTGCGGTGTATGCGCGG 640
 QY 301 TCAACCCGTTGGGTTTCATCGAGACGCGCTACCGCAAGGTGTGCGAGCGGTGTGTCACCG 360
 Db 641 TCAACCCGTTGGGTTTCATCGAAGCGCGCTACCGCAAGGTGTGTCACCGGTGTGTCACCG 700
 QY 361 ACGAGATCCACTACCTGACCGCGGAGGAGCGGAGCGGAGCGGAGCGGAGCGGAGCGGAGCGG 420

Db 701 ACGAGATCGTGTACTGACCCGCGAGGAGGACCCGCCACGTCGTGGTGCACAGGCCAATT 760
Qy 421 CGCCATCGACGACAAAGGCGCGTTCGCGAGGCGCGCGTGTGTCGCGCGCGCAAGGCGG 480
Db 761 CGCCGATCGATGCGGACGGTGCCTTCGTTCGAGCGCGCGTGTGTCGCGCGCGCAAGGCGG 820
Qy 481 GCGAGGTGAGTACGTGCGTTCGTCGAGGTGGAATACATGGAACGTGTCGCGCGCGCAGA 540
Db 821 GCGAGGTGAGTACGTGCGTTCGTCGAGGTGGAATACATGGAACGTGTCGCGCGCGCAGA 880
Qy 541 TGGTGTGCGTGGCGACCGCGATGATCCCGTTCTTCGAGCAGACGACGCCAACGTCGCC 600
Db 881 TGGTGTGCGTGGCGACCGCGATGATTCCTCTTCGAGCAGACGACGCCAACGTCGCC 940
Qy 601 TGATGGGCGCAACATGACGAGCGCAGGCGG 630
Db 941 TCATGGGCGCAACATGACGAGCGCAGGCGG 970
RESULT 8
US-08-757-653-135
; Sequence 135, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-135
Query Match 75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;
Qy 36 ATCAACATCCGTCCAGTCGTGGCGCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCC 95
Db 1 ATCAACATCCGCGCGTGGTCGCGCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGC 60
Qy 96 CAGTTCATGGACGACGAAACACCGCTGTCGGGGTCCACCAAGCGCGCTGTGCGCG 155
Db 61 CAATTATGGACGACGAAACACCGCTGTGGGGTTGACCCCAAGCGCGCTGTGCGCG 120

Qy 156 CTGGCCCGGGTGTCTGTCTCCCGGAGCGCGCGGCTGGAGGTCCCGAGCGTGCACCCG 215
Db 121 CTGGCCCGGGTGTCTGTCTCCCGGAGCGCGCGGCTGGAGGTCCCGAGCGTGCACCCG 180
Qy 216 TCCACATACGCGCGGATGTGCGCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACCTACGCGCGGATGTGCGCGATCGAAACCCCTGAGGGGCCAACATCGGTCTGATC 240
Qy 276 GGCTCGCTGTGCGGTATGCGCGGTCAACCCGTTTCGGGTTTCATCGAGAGCGCGTACCGC 335
Db 241 GGCTCGCTGTGCGGTATGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACGCGGTACCGC 300
Qy 336 AAGTGTGTTCGACGCGGTGTCACCGACGAGATCCACTACCTGACCGCGCGACGAGGAGGAC 395
Db 301 AAGTGTGTTCGACGCGGTGTCAGGACGAGATCGGTACTGACCGCGCGACGAGGAGGAC 360
Qy 396 CGCCACGTGTGGCGCAGGCCAACTCGCCGATCGACGACAAAGGGCCGGTTCGCGGAGGCC 455
Db 361 CGCCACGTGTGGCACAGGCCAACTCGCCGATCGATCGCGACGGTCGCTTCGTGAGCGC 420
Qy 456 CGGTGTGTGTCGCGCGCGACGAGGCGGCGAGGTGAGTACGTGCGCTCGTCCGAGTGCAC 515
Db 421 CGGTGTGTGTCGCGCGCGACGAGGCGGCGAGGTGAGTACGTGCGCTCGTCCGAGTGCAC 480
Qy 516 TACATGAGACGTGTGCGCGCGCCAGATGGTGTGCGGTGGCCACCGCGATGATCCCGTTCTC 575
Db 481 TACATGAGACGTGTGCGCGCGCCAGATGGTGTGCGGTGGCCACCGCGATGATCCCGTTCTC 540
Qy 576 GAGCACGACGACGCCAAACCGTGCCTGATGGCGGCCAAACATGACGCGCCAGGGCGGTCCG 635
Db 541 GAGCACGACGACGCCAAACCGTGCCTCATGGGGGCCAAACATGACGCGCCAGGGCGGTCCG 600
Qy 636 CTGCTGCGCAGCGAGGCGCC 655
Db 601 CTGCTGCGTAGCGAGGCGCC 620
RESULT 9
US-08-757-653-138/c
; Sequence 138, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:


```

; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match          75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCAGTGTGCGCGCATCAAGAGGATCTTCGGCACAGCAGCTGTCC 95
Db 620 ATCAACATCCGCGCGGTGTGCGCGCATCAAGAGGATCTTCGGCACAGCAGCTGAGC 561

Qy 96 CAGTTTCATGACACAGAACACCGCTGTGCGGGCTCACCCAAAGCGCGCTGTGCGCG 155
Db 560 CAATTTCATGACACAGAACACCGCTGTGCGGGTTGACCCAAAGCGCGCTGTGCGCG 501

Qy 156 CTGGGCGCGGTGTGTCTGTCGGGAGCGCGCGGTGAGGTGCGGACGTGCACCG 215
Db 500 CTGGGCGCGCGGTGTGTCTGTCAGTGTGAGCGTGTGCGGGCTGAGGTGCGGACGTGCACCG 441

Qy 216 TCCCACTACGCGCGATGTGCGCGATCGAGACCCGAGGGTCCCAACATCGGTCTGATC 275
Db 440 TCGCACTACGCGCGATGTGCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

Qy 276 GCGTCGCTGTGCGGTGTATGCGCGGTCAACCGGTTTCGGGTTTCATCGAGACGCGTACCGC 335
Db 380 GCGTCGCTGTGCGGTGTATGCGCGGTCAACCGGTTTCGGGTTTCATCGAAAGCGCGTACCGC 321

Qy 336 AAGTGTGTGACGCGGTGTACCGACGAGATCCACTACCTGACCGCGGACGAGGAGGAC 395
Db 320 AAGTGTGTGACGCGGTGTGTAGCAGCAGATCGTGTACTGACCGCGGACGAGGAGGAC 261

Qy 396 GCGCACGTGTGCGCGAGCCAACTCGCGGATCGAGACCAAGGGCGCGGTTCGCGAGGCC 455
Db 260 GCGCACGTGTGCGCGAGCCAACTCGCGGATCGAGACCAAGGGCGCGGTTCGTCGAGCGC 201

Qy 456 GCGGTGTGTCGCGCGGAGCGCGGAGTGTGAGTACGTGCTCCCTCGTCGAGGTGAGC 515
Db 200 GCGGTGTGTCGCGCGGAGCGCGGAGTGTGAGTACGTGCTCCCTCGTCGAGGTGAGC 141

Qy 516 TACATGACGTGTGCGCGCGCAGATGTGTGCGGTGCGGACCGCGATGATCCCGTTCTC 575
Db 140 TACATGACGTGTGCGCGCGCAGATGTGTGCGGTGCGGACCGCGATGATCCCGTTCTC 81

Qy 576 GAGCAGCAGCGCCAAACCGTCCCTGATGGCGCCAAACATGACGCGCGCGGTTCG 635
Db 80 GAGCAGCAGCGCCAAACCGTCCCTGATGGCGCCAAACATGACGCGCGCGGTTCGCG 21

Qy 636 CTGGTGTGCGAGCGAGCGCC 655
Db 20 CTGGTGTGCGAGCGAGCGCC 1

```

```

RESULT 10
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSER: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA

```

```

; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

Query Match          75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCAGTGTGCGCGCATCAAGAGGATCTTCGGCACAGCAGCTGTCC 95
Db 1 ATCAACATCCGCGCGGTGTGCGCGCATCAAGAGGATCTTCGGCACAGCAGCTGAGC 60

Qy 96 CAGTTTCATGACACAGAACACCGCTGTGCGGGCTCACCCAAAGCGCGCTGTGCGCG 155
Db 61 CAATTTCATGACACAGAACACCGCTGTGCGGGTTGACCCAAAGCGCGCTGTGCGCG 120

Qy 156 CTGGGCGCGGTGTGTCTGTCGGGAGCGCGCGGTGAGGTTCGCGACGTGCACCG 215
Db 121 CTGGGCGCGCGGTGTGTCTGTCAGTGTGCGGTGCGGGTTCGCGACGTGCACCG 180

Qy 216 TCCCACTACGCGCGATGTGCGCGATCGAGACCCGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGATGTGCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

Qy 276 GCGTCGCTGTGCGGTGTATGCGCGGTCAACCGGTTTCGGGTTTCATCGAGACCGCTACCGC 335
Db 241 GCGTCGCTGTGCGGTGTATGCGCGGTCAACCGGTTTCGGGTTTCATCGAAACCGCTACCGC 300

Qy 336 AAGTGTGTGACGCGGTGTGTCACCGAGATCCACTACCTGACCGCGCGGACGAGGAGGAC 395
Db 301 AAGTGTGTGACGCGGTGTGTCACCGAGATCGTGTACCTGACCGCGCGGAGGAGGAC 360

Qy 396 GCGCACGTGTGCGCGAGGCCAACTCGCGGATCGAGACCAAGGGCGCGGTTCGCGAGGCC 455
Db 361 GCGCACGTGTGCGCGAGGCCAACTTCGCGGATCGATGCGGACGTGCTTCGTCGAGCGC 420

Qy 456 GCGGTGTGTCGCGCGGAGCGCGGAGTGTGAGTACGTGCTCCCTCGTCGAGGTGAGC 515
Db 421 GCGGTGTGTCGCGCGGAGCGCGGAGTGTGAGTACGTGCTCCCTCGTCGAGGTGAGC 480

Qy 516 TACATGACGTGTGCGCGCGCAGATGTGTGCGGTGCGGACCGCGATGATCCCGTTCTC 575
Db 481 TACATGACGTGTGCGCGCGCAGATGTGTGCGGTGCGGACCGCGATGATTCCTTCCTG 540

Qy 576 GAGCAGCAGCGCCAAACCGTCCCTGATGGCGCCAAACATGACGCGCGCGGTTCG 635
Db 541 GAGCAGCAGCGCCAAACCGTCCCTGATGGCGCCAAACATGACGCGCGCGGTTCGCG 600

Qy 636 CTGGTGTGCGAGCGAGCGCC 655

```

```

Db      601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 11
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROM, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-138

Query Match      75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCAGTGGCGCGATCAAGAGTTCTTCGGCACCCAGCAGCTGTCC 95
Db      |||
Qy      620 ATCAACATCCGTCAGTGGCGCGATCAAGAGTTCTTCGGCACCCAGCAGCTGAGC 561
Db      |||
Qy      96 CAGTTATGACAGAACAAACCGCTGTTCGGGGTCAACCAAGAGCGCGCTGTCCGGC 155
Db      |||
Qy      560 CAATTATGACAGAACAAACCGCTGTTCGGGGTCAACCAAGAGCGCGCTGTCCGGC 501
Db      |||
Qy      156 CTGGCGCGGTGTCTGTCTCCGGGAGCGCGCGCTGGAGTCCGGAGCTGCACCCG 215
Db      |||
Qy      500 CTGGGGCGCGGTGTCTGTACAGTGGCGTCCGGGTGGAGTCCGGAGCTGCACCCG 441
Db      |||
Qy      216 TCCCACTACGCCCGGATGTGCCGATCGAGACCCCGAGGTTCCCAACATCGGTCTGATC 275
Db      |||
Qy      440 TCGCACTACGCCCGGATGTGCCGATCGAACCCTTGAAGGGCCCAACATCGGTCTGATC 381
Db      |||
Qy      276 GGCTCGCTGTTCGGTGTATGCGCGGGTCAACCCGTTTCGGGTTCATCGAGAGCCGTCACCG 335
Db      |||
Qy      380 GGCTCGCTGTTCGGTGTATGCGCGGGTCAACCCGTTTCGGGTTCATCGAAGCCGTCACCG 321
Db      |||
Qy      336 AAGTGTGTTCGACGCGGTGTTCACCGAGAGATCACTACCTGACCGCGCGAGGAGGAC 395
Db      |||
Qy      320 AAGTGTGTTCGACGCGGTGTTCGACGAGATGTGTACCTGTACCTGTACCTGTACCTGTAC 261

```

```

Qy      396 CGCCACGTGTGGCGCAGGCCAACTCGCCGATCGACGACAAAGGCCCGGTTCGGCGAGGCC 455
Db      |||
Qy      260 CGCCACGTGTGGCGCAGGCCAACTCGCCGATCGATCGCGAGCGTTCGTCGAGCGCG 201
Db      |||
Qy      456 CGGGTGTGTTCGGCGCAAGAGCGGGCGAGGTGAGTACGTGCGCTTCGTCGAGGTGAGC 515
Db      |||
Qy      200 CGCGTGTGTTCGGCGCAAGAGCGGGCGAGGTGAGTACGTGCGCTTCGTCGAGGTGAGC 141
Db      |||
Qy      516 TACATGACGTGTTCGGCGCGCGAGATGGTTCGGTGGCGCACCGCGATGATCCCGTTCCTC 575
Db      |||
Qy      140 TACATGACGTGTTCGGCGCGCGAGATGGTTCGGTGGCGCACCGCGATGATTCCTTCCTG 81
Db      |||
Qy      576 GAGCACGACGACGCCAACCGTGCCTGATGGCGGCCAAACATGACAGCGCCAGCGGTTCCG 635
Db      |||
Qy      80 GAGCACGACGACGCCAACCGTGCCTGATGGCGGCCAAACATGACAGCGCCAGCGGTTCCG 21
Db      |||
Qy      636 CTGGTGGCGAGCGAGGCCGC 655
Db      |||
Qy      20 CTGGTGGCGAGCGAGGCCGC 1

RESULT 12
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROM, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match      75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCAGTGGCGCGATCAAGAGTTCTTCGGCACCCAGCAGCTGTCC 95
Db      |||
Qy      1 ATCAACATCCGTCAGTGGCGCGATCAAGAGTTCTTCGGCACCCAGCAGCTGAGC 60

```

QY 96 CAGTTTCATGACGACGACCAACCCGCTGTCCGGGCTCACCCACAGCGCGGCTGTCCGG 155
DB 61 CAATTCATGACGACGACCAACCCGCTGTCCGGGTTGACCCACAGCGCGGCTGTCCGG 120
QY 156 CTGGGCGCGGGTGTCTGTCCCGGAGCGGGCGGGCTGGAGGTCCGCGAGCTGCACCG 215
DB 121 CTGGGCGCGGGTGTCTGTACGTAGCGTGCCTGGGCTGGAGTCCGCGAGCTGCACCG 180
QY 216 TCCCACTACGCGCGGATGTCCCGATCGAGACCCCGGAGGTCCCAACATCGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 240
QY 276 GGCTCGCTGTCCGGTGTACCGGGGTCAACCGGTTCCGGTTCATCGAGACGCCGTACCG 335
DB 241 GGCTCGCTGTCCGGTGTACCGGGGTCAACCGGTTCCGGTTCATCGAAACGCCGTACCG 300
QY 336 AAGGTGGTTCGACGCGGTGTACCGACGAGATCCACTACCTACCGCGCGAGGAGGAC 395
DB 301 AAGGTGGTTCGACGCGGTGTAGCGACGAGATCGTGTACCTGACCGCGAGGAGGAC 360
QY 396 CGCCACGTGGTGGCGAGGCCAACTCGCGCATCGACGACAAAGGGCGGTTCCGCGAGGCC 455
DB 361 CGCCACGTGGTGGCGAGGCCAACTCGCGCATCGATCGGACGCGTTCGTCGAGCG 420
QY 456 CGGTGTCTGGTCCCGCGCAAGCGCGCGAGGTTCGAGTACGTCCTCGTCGAGGTGAC 515
DB 421 CGGTGTCTGGTCCCGCGCAAGCGCGCGAGGTTCGAGTACGTCCTCGTCGAGGTGAC 480
QY 516 TACATGAGCTGTCCCGCGCGAGATGTGTCCGTGGCCACCGCGATGATCCCGTTCCCT 575
DB 481 TACATGAGCTGTCCCGCGCGAGATGTGTCCGTGGCCACCGCGATGATCCCGTTCCCT 540
QY 576 GAGCAGCAGCGCCAAACCGTTCGCTGATGGCGCGCAACATGACGCGCGAGCGTTCCG 635
DB 541 GAGCAGCAGCGCCAAACCGTTCGCTGATGGCGCGCAACATGACGCGCGAGCGTTCCG 600
QY 636 CTGGTGGCAGCGAGCGGCC 655
DB 601 CTGGTGGCAGCGAGCGGCC 620

RESULT 13

US-09-655-378A-138/c

; Sequence 138, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; OLIVE, DAVID M.

; LYAMICHEV, VICTOR I.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 138:

US-09-655-378A-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGTGGCGCGATCAAGAGGTTCCTTCGGCACCAGCCAGCTGTCC 95
DB 620 ATCAACATCCGTCAGTCGTGGCGCGATCAAGAGGTTCCTTCGGCACCAGCCAGCTGTCC 561
QY 96 CAGTTTCATGACGACGACCAACCCGCTGTCCGGGCTCACCCACAAGCGCGCTGTCCGG 155
DB 560 CAATTCATGACGACGACCAACCCGCTGTCCGGGTTGACCCACAAGCGCGCTGTCCGG 501
QY 156 CTGGCGCGGTGTCTGTCTCCGGGAGCGCGCGGTGGAGGTCCGCGACGTCGCACCG 215
DB 500 CTGGCGCGGTGTCTGTCTCCGGGAGCGCGCGGTGGAGGTCCGCGACGTCGCACCG 441
QY 216 TCCCACTACGCGCGGTGTCCCGATCGAGACCCCGGAGGTCCCAACATCGTCTGATC 275
DB 440 TCGCACTACGCGCGGTGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 381
QY 276 GGCTCGCTGTCCGTGTATGCGCGGTCAACCCGTTCCGGTTTCATCGAGACGCCGTACCG 335
DB 380 GGCTCGCTGTCCGTGTACGCGGTCAACCCGTTCCGGTTTCATCGAAACGCCGTACCG 321
QY 336 AAGTGTGTCAGCGCGGTGTCCCGAGATCCACTACCTGACCGCGCGAGGAGGAC 395
DB 320 AAGTGTGTCAGCGCGGTGTTCAGCAGAGATCGTACCTGACCGCGCGAGGAGGAC 261
QY 396 CGCCACGTGGTGGCGCGAGGCCAACTCGCCGATCGACGACAGGCGCGTTCGCGAGGCC 455
DB 260 CGCCACGTGGTGGCGAGGCCAACTTCGCCGATCGATGCGGACGTCGTTTCGTCGAGCG 201
QY 456 CGGTGTCTGTCCCGCGCAAGCGCGCGAGGTCCAGTACGTCGCCCTCGTCGAGGTGAC 515
DB 200 CGGTGTCTGTCCCGCGCAAGCGCGCGAGGTCCAGTACGTCGCCCTCGTCTGAGGTGAC 141
QY 516 TACATGAGCTGTCCCGCGCGAGATGGTGTCCGTGGCCACCGCGATGATCCGTTCTC 575
DB 140 TACATGAGCTGTCCCGCGCGAGATGGTGTCCGTGGCCACCGCGATGATTCCTTCTC 81
QY 576 GAGCAGCAGCAGCGCAACCGTTCCTGATGGCGCCCAACATGACGCGCGAGCGGTTC 635
DB 80 GAGCAGCAGCAGCGCAACCGTTCCTGATGGCGCCCAACATGACGCGCGAGCGGTTC 21
QY 636 CTGGTGGCGAGCGAGCGCC 655
DB 20 CTGGTGGCGAGCGAGCGCC 1

RESULT 14

US-08-757-653-136

; Sequence 136, Application US/08757653

; Patent No. 5843669

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

; TITLE OF INVENTION: Thermolabile FEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190

```

CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
;
COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 136:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-136

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 1.3e-101;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGTCGGCGCATCAAGAGTTCTTCGGCACAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGCGTGTCCGCGCATCAAGAGTTCTTCGGCACAGCCAGCTGTCC 60
QY 96 CAGTTCATGGACCAAGAACCCGCTGTCCGGGCTCACCACAGCGCGCGCTGTCCGG 155
DB 61 CAATTATGACCAAGAACCAACCCGCTGTCCGGGTTGACCTCAAGCGCGCGACTGTCCGG 120
QY 156 CTGGCGCGCGGTGTCTGTCCCGGAGCGCGCGGTGAGGTCCTCGACGTCACCCG 215
DB 121 CTGGGCGCGCGGTGTCTGTCCAGTGAGCGTGTCCGCGCATCAAGAGTTCTTCGGCACAGCCAGCTGTCC 60
QY 96 CAGTTCATGGACCAAGAACCCGCTGTCCGGGCTCACCACAGCGCGCGCTGTCCGG 155
DB 61 CAATTATGACCAAGAACCAACCCGCTGTCCGGGTTGACCTCAAGCGCGCGACTGTCCGG 120
QY 156 CTGGCGCGCGGTGTCTGTCCCGGAGCGCGCGGTGAGGTCCTCGACGTCACCCG 215
DB 121 CTGGGCGCGCGGTGTCTGTCCAGTGAGCGTGTCCGCGCATCAAGAGTTCTTCGGCACAGCCAGCTGTCC 180
QY 216 TCCCACTACGCGCGGATGTCCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGCTGTCTGTATGCGCGGGTCAACCCCTTCCGGTTTCATCGAGACCGCGTACCG 335

CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
;
COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 137:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-137

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 1.3e-101;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGTCGGCGCATCAAGAGTTCTTCGGCACAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGCGTGTCCGCGCATCAAGAGTTCTTCGGCACAGCCAGCTGTCC 60
QY 96 CAGTTCATGGACCAAGAACCCGCTGTCCGGGCTCACCACAGCGCGCGCTGTCCGG 155
DB 61 CAATTATGACCAAGAACCAACCCGCTGTCCGGGTTGACCTCAAGCGCGCGACTGTCCGG 120
QY 156 CTGGCGCGCGGTGTCTGTCCCGGAGCGCGCGGTGAGGTCCTCGACGTCACCCG 215
DB 121 CTGGGCGCGCGGTGTCTGTCCAGTGAGCGTGTCCGCGCATCAAGAGTTCTTCGGCACAGCCAGCTGTCC 180
QY 216 TCCCACTACGCGCGGATGTCCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGCTGTCTGTATGCGCGGGTCAACCCCTTCCGGTTTCATCGAGACCGCGTACCG 335

CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
;
COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-138

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 1.3e-101;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGTCGGCGCATCAAGAGTTCTTCGGCACAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGCGTGTCCGCGCATCAAGAGTTCTTCGGCACAGCCAGCTGTCC 60
QY 96 CAGTTCATGGACCAAGAACCCGCTGTCCGGGCTCACCACAGCGCGCGCTGTCCGG 155
DB 61 CAATTATGACCAAGAACCAACCCGCTGTCCGGGTTGACCTCAAGCGCGCGACTGTCCGG 120
QY 156 CTGGCGCGCGGTGTCTGTCCCGGAGCGCGCGGTGAGGTCCTCGACGTCACCCG 215
DB 121 CTGGGCGCGCGGTGTCTGTCCAGTGAGCGTGTCCGCGCATCAAGAGTTCTTCGGCACAGCCAGCTGTCC 60
QY 96 CAGTTCATGGACCAAGAACCCGCTGTCCGGGCTCACCACAGCGCGCGCTGTCCGG 155
DB 61 CAATTATGACCAAGAACCAACCCGCTGTCCGGGTTGACCTCAAGCGCGCGACTGTCCGG 120
QY 156 CTGGCGCGCGGTGTCTGTCCCGGAGCGCGCGGTGAGGTCCTCGACGTCACCCG 215
DB 121 CTGGGCGCGCGGTGTCTGTCCAGTGAGCGTGTCCGCGCATCAAGAGTTCTTCGGCACAGCCAGCTGTCC 180
QY 216 TCCCACTACGCGCGGATGTCCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGCTGTCTGTATGCGCGGGTCAACCCCTTCCGGTTTCATCGAGACCGCGTACCG 335
```

```
Db      241  GGCTCGTGTGGGTACGCGGGGTCAACCGTTTGGGTTTCATCGAAACGCCGTACCGC  300
Qy      336  AAGTGGTTCGACGGCGTGGTCAACCGACGAGATCCACTACCTGACCGCCGACGAGAGGAC  395
Db      301  AAGGTGGTTCGACGGCGTGGTTAGCCGACGAGATCGTGTACCTGACCGCCGACGAGAGGAC  360
Qy      396  CGCCACGTGGTGGCGCAGGCCAACTCGCCGATCGACGACAAAGGGCCGGTTGCGGAGGCC  455
Db      361  CGCCACGTGGTGGCACAGGCCAATTGCGCGATCGATGCGGACGGTCGCTTCGTCAGCCG  420
Qy      456  CGGTTGCTGGTCCGCCGCAAGCGGGCGAGTTCGAGTACGTGCCCTCGTCCGAGGTGGAC  515
Db      421  CGCGTGTCTGGTCCGCCGCAAGCGGGCGAGTGGAGTACGTGCCCTCGTCTGAGGTGGAC  480
Qy      516  TACATGGAGCTGTCCCGCGCCAGATGGTGTGGTGGCCACCGCGATGATCCCGTTCTC  575
Db      481  TACATGGAGCTGTCCCGCCCGCAGATGGTGTGGTGGCCACCGCGATGATTCCTTCTCG  540
Qy      576  GAGCACGACGACGCCCAACCGTGCCCTGATGGSCGCCAACATGCGCGCCAGCGCGTTCCG  635
Db      541  GAGCACGACGACGCCCAACCGTGCCCTCATGGGGGCCAAACATGACGCCCGCGGTGCCG  600
Qy      636  CTGTTGCGCAGCGAGCGGCC  655
Db      601  CTGTTCCGTAGCGAGGCCCC  620
```

Search completed: August 24, 2005, 22:24:24
Job time : 114.459 secs

This Page Blank (uspto)


```
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 26193
; LENGTH: 3288
; TYPE: DNA
; ORGANISM: Mycobacterium bovis
; US-10-282-122A-26193

Query Match      98.9%; Score 697.4; DB 17; Length 3288;
Best Local Similarity 99.9%; Pred. No. 3.9e-171;
Matches 698; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACGTTGATCAACATCCGGCGGTGGTGC CGG 60
DB 971 CCCAGACGTGGAGGCGATCACACCGCAGACGTTGATCAACATCCGGCGGTGGTGC CGG 1030
QY 61 CGATCAAGAGTCTTCGGCAGCAGCAGCAGTGAAGCAATTCATGACGAGAACACCCGC 120
DB 1031 CGATCAAGAGTCTTCGGCAGCAGCAGCAGTGAAGCAATTCATGACGAGAACACCCGC 1090
QY 121 TGTCCGGGTGTACCCACAAGCCGACTGTCCGCGCTGGGGCCCGCGGTCTGTACGCG 180
DB 1091 TGTCCGGGTGTACCCACAAGCCGACTGTCCGCGCTGGGGCCCGCGGTCTGTACGCG 1150
QY 181 AGCGTCGCGGTGGAGGTCCGCGACGTGCACCCGTCGCACTACGCGCGGATGTGCCGA 240
DB 1151 AGCGTCGCGGTGGAGGTCCGCGACGTGCACCCGTCGCACTACGCGCGGATGTGCCGA 1210
QY 241 TCGAAACCCCTGAGGGGCCAATCGTCTGATCGGCTCGTGTGCTGTGATAGCGCGGG 300
DB 1211 TCGAAACCCCTGAGGGGCCAATCGTCTGATCGGCTCGTGTGCTGTGATAGCGCGGG 1270
QY 301 TCAACCCGTTCCGGTTTCATCGAAACCGCGTACCGCAAGGTGTGACAGCGGTGTAGCG 360
DB 1271 TCAACCCGTTCCGGTTTCATCGAAACCGCGTACCGCAAGGTGTGACAGCGGTGTAGCG 1330
QY 361 ACGAGATCGTGTACCTGACCGCGCAGCAGGAGACCGCCACGTCGTGGTGACAGGCAATT 420
DB 1331 ACGAGATCGTGTACCTGACCGCGCAGCAGGAGACCGCCACGTCGTGGTGACAGGCAATT 1390
QY 421 CGCCGATCATCGGACGCTCGTTCGTGACGCGCGCTGTGCTGCGCCGCAAGGCGG 480
DB 1391 CGCCGATCATCGGACGCTCGTTCGTGACGCGCGCTGTGCTGCGCCGCAAGGCGG 1450
QY 481 GCGAGTGGAGTACGTGCGCTCGTCTGAGGTGAGTACATGACGCTCTCGCCCGCCAGA 540
DB 1451 GCGAGTGGAGTACGTGCGCTCGTCTGAGGTGAGTACATGACGCTCTCGCCCGCCAGA 1510
QY 541 TGGTGTCCGTGGCCACCGCGATGATTCCCTTCTGGAGCAGCAGCAGCAGCCGCTGCC 600
DB 1511 TGGTGTCCGTGGCCACCGCGATGATTCCCTTCTGGAGCAGCAGCAGCAGCCGCTGCC 1570
QY 601 TCATGGGGCAAAATGACGCGCAGGCGGTGCGTGTGCTGTGCTGTGCTGTGCTGTGCTG 660
DB 1571 TCATGGGGCAAAATGACGCGCAGGCGGTGCGTGTGCTGTGCTGTGCTGTGCTGTGCTG 1630
QY 661 TGGGCACCGGATGGAGCTGCGCGCGCGATCGACGCGG 699
```

```
DB 1631 TGGGCACCGGATGGAGCTGCGCGCGCGATCGACGCGG 1669

RESULT 4
US-09-712-363-30
; Sequence 30, Application US/09712363
; Patent No. US20020164588A1
; GENERAL INFORMATION:
; APPLICANT: Eisenberg, David
; APPLICANT: Rotstein, Sergio H.
; APPLICANT: Marcotte, Edward M.
; TITLE OF INVENTION: DETERMINING THE FUNCTIONS AND
; INTERACTIONS OF PROTEINS BY COMPARATIVE ANALYSIS
; FILE REFERENCE: 07419-032001
; CURRENT APPLICATION NUMBER: US/09/712,363
; CURRENT FILING DATE: 2000-11-13
; PRIOR APPLICATION NUMBER: PCT/US00/02246
; PRIOR FILING DATE: 2000-01-28
; PRIOR APPLICATION NUMBER: 60/179,531
; PRIOR FILING DATE: 2000-02-01
; PRIOR APPLICATION NUMBER: 60/117,844
; PRIOR FILING DATE: 1999-01-29
; PRIOR APPLICATION NUMBER: 60/118,206,
; PRIOR FILING DATE: 1999-02-01
; PRIOR APPLICATION NUMBER: 60/126,593
; PRIOR FILING DATE: 1999-03-26
; PRIOR APPLICATION NUMBER: 60/134,093
; PRIOR FILING DATE: 1999-05-14
; PRIOR APPLICATION NUMBER: 60/134,092
; PRIOR FILING DATE: 1999-05-14
; PRIOR APPLICATION NUMBER: 60/165,124
; PRIOR FILING DATE: 1999-11-12
; PRIOR APPLICATION NUMBER: 60/165,086
; PRIOR FILING DATE: 1999-11-12
; NUMBER OF SEQ ID NOS: 292
; SOFTWARE: PaetSeq for Windows Version 4.0
; SEQ ID NO 30
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; US-09-712-363-30

Query Match      98.9%; Score 697.4; DB 9; Length 3519;
Best Local Similarity 99.9%; Pred. No. 3.9e-171;
Matches 698; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACGTTGATCAACATCCGGCGGTGGTGC CGG 60
DB 1199 CCCAGACGTGGAGGCGATCACACCGCAGACGTTGATCAACATCCGGCGGTGGTGC CGG 1258
QY 61 CGATCAAGAGTCTTCGGCAGCAGCAGCAGTGAAGCAATTCATGACGAGAACACCCGC 120
DB 1259 CGATCAAGAGTCTTCGGCAGCAGCAGCAGTGAAGCAATTCATGACGAGAACACCCGC 1318
QY 121 TGTCCGGGTGTACCCACAAGCCGACTGTCCGCGCTGGGGCCCGCGGTCTGTACGCTG 180
DB 1319 TGTCCGGGTGTACCCACAAGCCGACTGTCCGCGCTGGGGCCCGCGGTCTGTACGCTG 1378
QY 181 AGCGTCGCGGTGGAGGTCCGCGACGTGCACCCGTCGCACTACGCGCGGATGTGCCGA 240
DB 1379 AGCGTCGCGGTGGAGGTCCGCGACGTGCACCCGTCGCACTACGCGCGGATGTGCCGA 1438
QY 241 TCGAAACCCCTGAGGGGCCAATCGTCTGATCGGCTCGTGTGCTGTGCTGTGCTGTGCTG 300
DB 1439 TCGAAACCCCTGAGGGGCCAATCGTCTGATCGGCTCGTGTGCTGTGCTGTGCTGTGCTG 1498
QY 301 TCAACCCGTTCCGGTTTCATCGAAACCGCGTACCGCAAGGTGTGCTACGCGCGGTAGCG 360
DB 1499 TCAACCCGTTCCGGTTTCATCGAAACCGCGTACCGCAAGGTGTGCTACGCGCGGTAGCG 1558
QY 361 ACGAGATCGTGTACCTGACCGCGCAGGAGGACCGCGACGTGTGCTGTGCTGTGCTGTGCTG 420
```

Db 1559 ACAGATCGTGTAACCTGACCCGCGCAGAGAGGACCGCCACCGTGTGGCAGAGGCCAATT 1618
 Qy 421 CGCCGATCGATCGGACGCTCGCTTCGTGAGCGCGCTGTGTGTCGCGCGCAAGGCGG 480
 Db 1619 CGCCGATCGATCGGACGCTCGCTTCGTGAGCGCGCTGTGTGTCGCGCGCAAGGCGG 1678
 Qy 481 GCGAGTGGAGTACGTGCGCTCGTCTGAGGTGGAATACATGAGACGTCTCGCCCGCCAGA 540
 Db 1679 GCGAGTGGAGTACGTGCGCTCGTCTGAGGTGGAATACATGAGACGTCTCGCCCGCCAGA 1738
 Qy 541 TGGTGTGCTGCGACCGCGATGATTCCTTCTGAGGACACGACGCGCAACCGTGCCC 600
 Db 1739 TGGTGTGCTGCGACCGCGATGATTCCTTCTGAGGACACGACGCGCAACCGTGCCC 1798
 Qy 601 TCATGGGGGCAAAACATGACGCGCAGGCGGTGCGCTGCTGCTGAGGAGCGCGCTGG 660
 Db 1799 TCATGGGGGCAAAACATGACGCGCAGGCGGTGCGCTGCTGCTGAGGAGCGCGCTGG 1858
 Qy 661 TGGGCAACCGGATGAGGCTGCGCGCGCGGATCGACGCGG 699
 Db 1859 TGGGCAACCGGATGAGGCTGCGCGCGCGGATCGACGCGG 1897

RESULT 5

US-10-282-122A-28230
 ; Sequence 28230, Application US/10282122A
 ; Publication No. US20040029129A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Wang, Liangsu
 ; APPLICANT: Zamudio, Carlos
 ; APPLICANT: Malone, Cheryl
 ; APPLICANT: Haselbeck, Robert
 ; APPLICANT: Ohlsen, Karl
 ; APPLICANT: Zyskind, Judith
 ; APPLICANT: Wall, Daniel
 ; APPLICANT: Trawick, John
 ; APPLICANT: Carr, Grant
 ; APPLICANT: Yamamoto, Robert
 ; APPLICANT: Forsyth, R.
 ; APPLICANT: Xu, H.
 ; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
 ; FILE REFERENCE: ELITRA.034A
 ; CURRENT APPLICATION NUMBER: US/10/282,122A
 ; CURRENT FILING DATE: 2003-02-20
 ; PRIOR APPLICATION NUMBER: 60/191,078
 ; PRIOR FILING DATE: 2000-03-21
 ; PRIOR APPLICATION NUMBER: 60/206,848
 ; PRIOR FILING DATE: 2000-05-23
 ; PRIOR APPLICATION NUMBER: 60/207,727
 ; PRIOR FILING DATE: 2000-05-26
 ; PRIOR APPLICATION NUMBER: 60/230,335
 ; PRIOR FILING DATE: 2000-09-06
 ; PRIOR APPLICATION NUMBER: 60/230,347
 ; PRIOR FILING DATE: 2000-09-09
 ; PRIOR APPLICATION NUMBER: 60/242,578
 ; PRIOR FILING DATE: 2000-10-23
 ; PRIOR APPLICATION NUMBER: 60/253,625
 ; PRIOR FILING DATE: 2000-11-27
 ; PRIOR APPLICATION NUMBER: 60/257,931
 ; PRIOR FILING DATE: 2000-12-22
 ; PRIOR APPLICATION NUMBER: 60/267,636
 ; PRIOR FILING DATE: 2001-02-09
 ; PRIOR APPLICATION NUMBER: 60/269,308
 ; PRIOR FILING DATE: 2001-02-16
 ; Remaining Prior Application data removed - See File Wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 78614
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 28230
 ; LENGTH: 3519
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium tuberculosis
 US-10-282-122A-28230

Query Match 98.9%; Score 697.4; DB 17; Length 3519;
 Best Local Similarity 99.9%; Pred. No. 3.9e-171;
 Matches 698; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Qy 1 CCCAGGAGCTGGAGGCGATCAACGCGAGAGCTTGATCAACATCCGGCCGGTGTGCGCG 60
 Db 1199 CCCAGGAGCTGGAGGCGATCAACGCGAGAGCTTGATCAACATCCGGCCGGTGTGCGCG 1258
 Qy 61 CGATCAAGGAGCTTCTTGGGACACGACGCTGAGCCAAATTCATGACACAGAACACCCGC 120
 Db 1259 CGATCAAGGAGCTTCTTGGGACACGACGCTGAGCCAAATTCATGACACAGAACACCCGC 1318
 Qy 121 TGTGGGGTTGACCCACAAGCGCGACTGTGCGGGCTGGGGCCCGGGCTGTGTACAGCTG 180
 Db 1319 TGTGGGGTTGACCCACAAGCGCGACTGTGCGGGCTGGGGCCCGGGCTGTGTACAGCTG 1378
 Qy 181 AGCTGCGCGGCTGGAGTCCGCGACGTGCAACCGTTCGCACTACGCGCGGATGTGCCGA 240
 Db 1379 AGCTGCGCGGCTGGAGTCCGCGACGTGCAACCGTTCGCACTACGCGCGGATGTGCCGA 1438
 Qy 241 TCGAAACCCCTGAGGGGCCCAACATCGTCTGTGATCGGCTCGCTGTGCGTGTACGCGGG 300
 Db 1439 TCGAAACCCCTGAGGGGCCCAACATCGTCTGTGATCGGCTCGCTGTGCGTGTACGCGGG 1498
 Qy 301 TCAACCCGTTCCGGTTTCATCGAAACGCGGTACCGCAAGGTGGTTCGACGCGCTGTAGCG 360
 Db 1499 TCAACCCGTTCCGGTTTCATCGAAACGCGGTACCGCAAGGTGGTTCGACGCGCTGTAGCG 1558
 Qy 361 ACGAGATCGTGTACTGTACCGCGCAGGAGGAGGACCGCCACGCTGGTGGCAGAGCCAAAT 420
 Db 1559 ACGAGATCGTGTACTGTACCGCGCAGGAGGAGGACCGCCACGCTGGTGGCAGAGCCAAAT 1618
 Qy 421 CGCGCATCGATGCGGACGCTTCTGTCGAGCGCGGCTGCTGCTCCGCGCAAGGCGG 480
 Db 1619 CGCGCATCGATGCGGACGCTTCTGTCGAGCGCGGCTGCTGCTCCGCGCAAGGCGG 1678
 Qy 481 GCGAGTGGAGTACGTGCTCCCTCGTCTGAGTGGACTACATGAGAGCTGTCTGCGCCCGCCAGA 540
 Db 1679 GCGAGTGGAGTACGTGCTCCCTCGTCTGAGTGGACTACATGAGAGCTGTCTGCGCCCGCCAGA 1738
 Qy 541 TGGTGTGCTGGCGCACCGCGATGATTCCTTCTTGGAGCAGACGACGCGCAACCGTGCCC 600
 Db 1739 TGGTGTGCTGGCGCACCGCGATGATTCCTTCTTGGAGCAGACGACGCGCAACCGTGCCC 1798
 Qy 601 TCATGGGGGCAAAACATGACGCGCGGCGGTGCGCTGCTGCTAGCGAGGCCCGCGCTGG 660
 Db 1799 TCATGGGGGCAAAACATGACGCGCGGCGGTGCGCTGCTGCTAGCGAGGCCCGCGCTGG 1858
 Qy 661 TGGGCACCGGATGGAGCTGCGCGCGCGGATCGACGCGG 699
 Db 1859 TGGGCACCGGATGGAGCTGCGCGCGCGGATCGACGCGG 1897
 RESULT 6
 US-09-285-306-29
 ; Sequence 29, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingersas, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 29
 ; LENGTH: 687
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium bovis


```

; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/940,925A
; FILING DATE: 10-Jun-2002
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-940-925A-135

Query Match      87.9%; Score 620; DB 10; Length 620;
Best Local Similarity 100.0%; Pred. No. 4.6e-151;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 36 ATCAACATCCGCGCGGTGTCGCCGATCAAGAGATTCTTCGGACACGAGTGCAGC 95
DB 1 ATCAACATCCGCGCGGTGTCGCCGATCAAGAGATTCTTCGGACACGAGTGCAGC 60
QY 96 CAATTTCATGGACAGAACCAACCCGTCGCGGGTTGACCCAAAGCGCGACTGTCGGCG 155
DB 61 CAATTTCATGGACAGAACCAACCCGTCGCGGGTTGACCCAAAGCGCGACTGTCGGCG 120
QY 156 CTGGGGCCGCGCGTCTGTACGTGAGCGTGC CGGGTGGAGTCCGCGAGTGCACCCG 215
DB 121 CTGGGGCCGCGCGTCTGTACGTGAGCGTGC CGGGTGGAGTCCGCGAGTGCACCCG 180
QY 216 TCGCTACTAGCGCGGATGCGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 275
DB 181 TCGCTACTAGCGCGGATGCGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 240
QY 276 GGCCTCGCTGTCGGTGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACGCGTACCGC 335
DB 241 GGCCTCGCTGTCGGTGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACGCGTACCGC 300
QY 336 AAGGTGTGTCAGCGCGGTGTAGCAGCAGATCGTGTACTGACCGCGCAGAGAGGAC 395
DB 301 AAGGTGTGTCAGCGCGGTGTAGCAGCAGATCGTGTACTGACCGCGCAGAGAGGAC 360
QY 396 GCGCACGTGTGCGCAGCGCAATTCGCGATCGATGCGAGCGGTGCGTTCGTCGAGCGC 455
DB 361 GCGCACGTGTGCGCAGCGCAATTCGCGATCGATGCGAGCGGTGCGTTCGTCGAGCGC 420
QY 456 GCGCTGCTGTCGCGCGCAAGCGCGGAGGTGGAGTACGTGCCCTCGTCTGAGTGGAC 515
DB 421 GCGCTGCTGTCGCGCGCAAGCGCGGAGGTGGAGTACGTGCCCTCGTCTGAGTGGAC 480
QY 516 TACATGAGAGTCTCGCGCGCCGAGATGTTGTCGGTGGCCACCGCGATGATTCCTTCCTG 575
DB 481 TACATGAGAGTCTCGCGCGCCGAGATGTTGTCGGTGGCCACCGCGATGATTCCTTCCTG 540
QY 576 GAGCAGAGCAGCCCAACCGTCCCTCATGCGGGGCAAAACATGACGCGCGAGCGGTGCGC 635
DB 541 GAGCAGAGCAGCCCAACCGTCCCTCATGCGGGGCAAAACATGACGCGCGAGCGGTGCGC 600
QY 636 CTGGTCCGTAGCGAGGCCCC 655
```

```

DB 601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 9
US-09-940-925A-138/c
; Sequence 138, Application US/09940925A
; Publication No. US20030054338A1
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D. I.
; LYAMICHEV, DAVID M.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/940,925A
; FILING DATE: 10-Jun-2002
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 138:
US-09-940-925A-138

Query Match      87.9%; Score 620; DB 10; Length 620;
Best Local Similarity 100.0%; Pred. No. 4.6e-151;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 36 ATCAACATCCGCGCGGTGTCGCCGATCAAGAGATTCTTCGGACACGAGTGCAGC 95
DB 620 ATCAACATCCGCGCGGTGTCGCCGATCAAGAGATTCTTCGGACACGAGTGCAGC 561
QY 96 CAATTTCATGGACAGAACCAACCCGTCGCGGGTTGACCCAAAGCGCGACTGTCGGCG 155
DB 560 CAATTTCATGGACAGAACCAACCCGTCGCGGGTTGACCCAAAGCGCGACTGTCGGCG 501
QY 156 CTGGGGCCGCGCGTCTGTACGTGAGCGTGC CGGGTGGAGTCCGCGAGTGCACCCG 215
DB 500 CTGGGGCCGCGCGTCTGTACGTGAGCGTGC CGGGTGGAGTCCGCGAGTGCACCCG 441
QY 216 TCGCATTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 275
DB 440 TCGCATTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 381
QY 276 GGCCTCGCTGTCGGTGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACGCGTACCGC 335
DB 380 GGCCTCGCTGTCGGTGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACGCGTACCGC 321
QY 336 AAGGTGTGTCAGCGCGGTGTTAGCGAGATCGTGTACCTGACCGCGCGAGGAGAC 395
```

Db 320 AGGTGTCAGCGCGTGTGTACGACGAGATCGTGTACTGACCCCGCAGGAGGAC 261
QY 396 CGCCACGTGGTGCACAGCGCAATTCGCCGATCGATCGGACGGTCTGCTCGAGCGG 455
Db 260 CGCCACGTGGTGCACAGCGCAATTCGCCGATCGATCGGACGGTCTGCTCGAGCGG 201
QY 456 CGCGTCTGGTCCGCGCAGGCGGCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC 515
Db 200 CGCGTCTGGTCCGCGCAGGCGGCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC 141
QY 516 TACATGAGACGTCTCGCGCCCGCCAGATGGTGTGGTGGCCACCGCGATGATTCCTTCCTG 575
Db 140 TACATGAGACGTCTCGCGCCCGCCAGATGGTGTGGTGGCCACCGCGATGATTCCTTCCTG 81
QY 576 GAGCAGCAGACGCCAACCGTGCCTCATGGGGGCAAAATGACAGCGCCAGGCGGTGCCG 635
Db 80 GAGCAGCAGACGCCAACCGTGCCTCATGGGGGCAAAATGACAGCGCCAGGCGGTGCCG 21
QY 636 CTGGTCCGTAGCGAGGCCCC 655
Db 20 CTGGTCCGTAGCGAGGCCCC 1

RESULT 10

US-09-941-193A-135
; Sequence 135, Application US/09941193A
; Publication No. US20030108873A1
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; LYAMICHEV, VICTOR I.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS

NUMBER OF SEQUENCES: 165

CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN & CARROLL
STREET: 220 MONTGOMERY STREET, SUITE 2200
CITY: SAN FRANCISCO
STATE: CALIFORNIA
COUNTRY: UNITED STATES OF AMERICA
ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/941,193A
FILING DATE: 28-Aug-2001
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: CARROLL, PETER G.
REGISTRATION NUMBER: 32,837
REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 135:

SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
SEQUENCE DESCRIPTION: SEQ ID NO: 135:

US-09-941-193A-135

Query Match 87.9%; Score 620; DB 10; Length 620;
Best Local Similarity 100.0%; Pred. No. 4.6e-151;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 36 ATCAACATCCGGCGGTGTGCGCGGATCAAGGAGTTCTTGGCCACGACCGAGTGGAC 95

Db 1 ATCAACATCCGGCGGTGTGCGCGGATCAAGGAGTTCTTGGCCACGACCGAGTGGAC 60
QY 96 CAATTATCGGACAGAAACAACCCGCTGTGCGGGTTTGACCCACAAGCGCGACTGTGCGGG 155
Db 61 CAATTATCGGACAGAAACAACCCGCTGTGCGGGTTTGACCCACAAGCGCGACTGTGCGGG 120
QY 156 CTGGGGCCCGGGGCTGTGTACGTGAGCGTGCAGGCTGCGGGCTGGAGGTCCGCGACGTGCAACCG 215
Db 121 CTGGGGCCCGGGGCTGTGTACGTGAGCGTGCAGGCTGCGGGCTGGAGGTCCGCGACGTGCAACCG 180
QY 216 TCGCACTACGGCGCGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACAATCGGTCTGATC 275
Db 181 TCGCACTACGGCGCGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACAATCGGTCTGATC 240
QY 276 GGCTCGCTGTGCGTGTACGCGCGGTCAACCCGTTGCGGTTTCATCGAAACGCCGTACCCG 335
Db 241 GGCTCGCTGTGCGTGTACGCGCGGTCAACCCGTTGCGGTTTCATCGAAACGCCGTACCCG 300
QY 336 AAGGTGGTGGCGCGGTGTAGCCAGAGATCGTGTACCTGACCGCGCAGGAGGAC 395
Db 301 AAGGTGGTGGCGCGGTGTAGCCAGAGATCGTGTACCTGACCGCGCAGGAGGAC 360
QY 396 CGCCACGTGGTGGCACAGGCCAATTCGCCGATCGATGCGGACGCTCGCTTCGTCGAGCGG 455
Db 361 CGCCACGTGGTGGCACAGGCCAATTCGCCGATCGATGCGGACGCTCGCTTCGTCGAGCGG 420
QY 456 CGCGTGTGCTGCGCGCCGCAAGCGCGGCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC 515
Db 421 CGCGTGTGCTGCGCGCCGCAAGCGCGGCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC 480
QY 516 TACATGAGACGTCTCGCGCCCGCCAGATGGTGTGCGTGGCCACCGCGATGATTCCTTCCTG 575
Db 481 TACATGAGACGTCTCGCGCCCGCCAGATGGTGTGCGTGGCCACCGCGATGATTCCTTCCTG 540
QY 576 GAGCAGCAGCGCCCAACCGTGCCTCATGGGGCAAAATGACAGCGCCAGCGGTGCCG 635
Db 541 GAGCAGCAGCGCCCAACCGTGCCTCATGGGGCAAAATGACAGCGCCAGCGGTGCCG 600
QY 636 CTGGTCCGTAGCGAGGCCCC 655
Db 601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 11
US-09-941-193A-138/c
; Sequence 138, Application US/09941193A
; Publication No. US20030108873A1
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; LYAMICHEV, VICTOR I.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/941,193A
; FILING DATE: 28-Aug-2001
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
; US-09-941-193A-135

Query Match 87.9%; Score 620; DB 10; Length 620;
Best Local Similarity 100.0%; Pred. No. 4.6e-151;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 36 ATCAACATCCGGCGGTGTGCGCGGATCAAGGAGTTCTTGGCCACGACCGAGTGGAC 95

REGISTRATION NUMBER: 32,837
REFERENCE/DOCKET NUMBER: FORS-01756
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 138:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
SEQUENCE DESCRIPTION: SEQ ID NO: 138:
US-09-941-193A-138

Query Match 87.9%; Score 620; DB 10; Length 620;
Best Local Similarity 100.0%; Pred. No. 4.6e-151;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 36 ATCAACATCCGCGCGGTGTCGCCGATCAAGGAGTTCTTCGGCACAGCCAGCTGAGC 95
DB 620 ATCAACATCCGCGCGGTGTCGCCGATCAAGGAGTTCTTCGGCACAGCCAGCTGAGC 561
QY 96 CAATTATGACACAGAACCAACCGCTGTGCGGGTTGACCCAAAGCGCGACTGTGCGG 155
DB 560 CAATTATGACACAGAACCAACCGCTGTGCGGGTTGACCCAAAGCGCGACTGTGCGG 501
QY 156 CTGGGGCCGGGGTCTGTACGTGAGCGGTGCGGGCTGGAGTCCGGAGTGCACCG 215
DB 500 CTGGGGCCGGGGTCTGTACGTGAGCGGTGCGGGCTGGAGTCCGGAGTGCACCG 441
QY 216 TCGCACTACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCAAACATCGGTCTGATC 275
DB 440 TCGCACTACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCAAACATCGGTCTGATC 381
QY 276 GGCTCGCTGTGCGGTGACCGCGGGTCAACCGCTTCGGGTTTCATCGAAACCGCGTACCGC 335
DB 380 GGCTCGCTGTGCGGTGACCGCGGGTCAACCGCTTCGGGTTTCATCGAAACCGCGTACCGC 321
QY 336 AAGGTGTTGACGGGTGTTAGCACGAGATCGTGATCCTGACCGCGCAGGAGGAC 395
DB 320 AAGGTGTTGACGGGTGTTAGCACGAGATCGTGATCCTGACCGCGCAGGAGGAC 261
QY 396 CGCCACGTGTGGCAGCCAAATTCGCCGATCGAGCGGTGCGTTCGTTCGAGCGG 455
DB 260 CGCCACGTGTGGCAGCCAAATTCGCCGATCGAGCGGTGCGTTCGTTCGAGCGG 201
QY 456 CGCGTGTGTCGCGCGCAAGCGCGGAGGTGAGTACGTGCCCTCGTTCGAGTGGAC 515
DB 200 CGCGTGTGTCGCGCGCAAGCGCGGAGGTGAGTACGTGCCCTCGTTCGAGTGGAC 141
QY 516 TACATGGAGCTTCGCGCGCGCAGATGTTGTCGGTGGCCACCGCGATGATTCCTTCCTG 575
DB 140 TACATGGAGCTTCGCGCGCGCAGATGTTGTCGGTGGCCACCGCGATGATTCCTTCCTG 81
QY 576 GAGCAGCAGCGCCAAACCGTCCCTCATGCGGGGCAAAACATCAGCGCGCAGCGGTGCGG 635
DB 80 GAGCAGCAGCGCCAAACCGTCCCTCATGCGGGGCAAAACATCAGCGCGCAGCGGTGCGG 21
QY 636 CTGGTCCGTAGGAGGCCCC 655
DB 20 CTGGTCCGTAGGAGGCCCC 1

RESULT 12
US-10-409-594-135
Sequence 135, Application US/10409594
Publication No. US20050158716A1
GENERAL INFORMATION:
APPLICANT: BROW, MARY ANN D.
LYAMICHEV, VICTOR I.
OLIVE, DAVID M.
TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

PATHOGENS
NUMBER OF SEQUENCES: 165
CORRESPONDENCE ADDRESS:
ADDRESSEE: MEDLEN & CARROLL
STREET: 220 MONTGOMERY STREET, SUITE 2200
CITY: SAN FRANCISCO
STATE: CALIFORNIA
COUNTRY: UNITED STATES OF AMERICA
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/409,594
FILING DATE: 08-Apr-2003
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: CARROLL, PETER G.
REGISTRATION NUMBER: 32,837
REFERENCE/DOCKET NUMBER: FORS-01756
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 135:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-10-409-594-135

Query Match 87.9%; Score 620; DB 22; Length 620;
Best Local Similarity 100.0%; Pred. No. 4.6e-151;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 36 ATCAACATCCGCGCGGTGTCGCCGATCAAGGAGTTCTTCGGCACAGCCAGCTGAGC 95
DB 1 ATCAACATCCGCGCGGTGTCGCCGATCAAGGAGTTCTTCGGCACAGCCAGCTGAGC 60
QY 96 CAATTATGACACAGAACCAACCGCTGTGCGGGTTGACCCAAAGCGCGACTGTGCGG 155
DB 61 CAATTATGACACAGAACCAACCGCTGTGCGGGTTGACCCAAAGCGCGACTGTGCGG 120
QY 156 CTGGGGCCGGCGGTCTGTACGTGAGCGTCCGGGCTGGAGGTCCGGCAGCTGCACCG 215
DB 121 CTGGGGCCGGCGGTCTGTACGTGAGCGTCCGGGCTGGAGGTCCGGCAGCTGCACCG 180
QY 216 TCGCACTACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCAAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCAAACATCGGTCTGATC 240
QY 276 GGCTCGCTGTGCGGTGACCGCGGGTCAACCGCTTCGGGTTTCATCGAAACCGCGTACCGC 335
DB 241 GGCTCGCTGTGCGGTGACCGCGGGTCAACCGCTTCGGGTTTCATCGAAACCGCGTACCGC 300
QY 336 AAGGTGTTGACCGCGGTGTTAGCGACGAGATCGTGATCCTGACCGCGCAGGAGGAC 395
DB 301 AAGGTGTTGACCGCGGTGTTAGCGACGAGATCGTGATCCTGACCGCGCAGGAGGAC 360
QY 396 CGCCACGTGTGGCAGCCAAATTCGCCGATCGATCGGAGCGGTTCGTTCGAGCGG 455
DB 361 CGCCACGTGTGGCAGCCAAATTCGCCGATCGATCGGAGCGGTTCGTTCGAGCGG 420
QY 456 CGCGTGTGTCGCGCGCAAGCGCGGAGGTGAGTACGTGCCCTCGTTCGAGTGGAC 515
DB 421 CGCGTGTGTCGCGCGCAAGCGCGGAGGTGAGTACGTGCCCTCGTTCGAGTGGAC 480
QY 516 TACATGGAGCTTCGCGCGCGCAGATGTTGTCGGTGGCCACCGCGATGATTCCTTCCTG 575

Db 481 TACATGACGTCTCGCCCGCCAGATGTTCTCGGTGGCCACCGCGATGATTCCTTCCTG 540

QY 576 GAGCAGACAGACCCCAACCGTGCCTCATGCGGGGCAAAACATGACGCGCCAGCGGTGCGG 635

Db 541 GAGCAGACAGACCCCAACCGTGCCTCATGCGGGGCAAAACATGACGCGCCAGCGGTGCGG 600

QY 636 CTGGTCGTAGGAGGCCCC 655

Db 601 CTGGTCGTAGGAGGCCCC 620

RESULT 13

US-10-409-594-138/c

; Sequence 138, Application US/10409594

; Publication No. US20050158716A1

GENERAL INFORMATION:

APPLICANT: BROW, MARY ANN D.

LYAMICHEV, VICTOR I.

OLIVE, DAVID M.

TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

NUMBER OF SEQUENCES: 165

CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN & CARROLL

STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/10/409,594

FILING DATE: 08-Apr-2003

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: CARROLL, PETER G.

REGISTRATION NUMBER: 32,837

REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 138:

SEQUENCE CHARACTERISTICS:

LENGTH: 620 base pairs

TYPE: nucleic acid

STRANDEDNESS: double

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

SEQUENCE DESCRIPTION: SEQ ID NO: 138:

US-10-409-594-138

Query Match 87.9%; Score 620; DB 22; Length 620;

Best Local Similarity 100.0%; Pred. No. 4.6e-151;

Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 36 ATCAACATCCGCGCGGTGTCGCGGATCAAGGAGTCTTCGGACACAGCCAGCTGAGC 95

Db 620 ATCAACATCCGCGCGGTGTCGCGGATCAAGGAGTCTTCGGACACAGCCAGCTGAGC 561

QY 96 CAATTTCATGACAGCAACCCGCTGTCTGGGGTTGACCCCAAGCGCGGACTGTGCGG 155

Db 560 CAATTTCATGACAGCAACCCGCTGTCTGGGGTTGACCCCAAGCGCGGACTGTGCGG 501

QY 156 CTGGGGCCCGGGTCTGTACGTGAGCGTGGCGGCTGGAGGTCCGCGACGTGACCCG 215

Db 500 CTGGGGCCCGGGTCTGTACGTGAGCGTGGCGGCTGGAGGTCCGCGACGTGACCCG 441

QY 216 TCGCACTACGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275

Db 440 TCGCACTACGCGGATGTCGCGGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

QY 276 GGCCTCGCTGTCTGATGACGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCGTACCCG 335

Db 380 GGCCTCGCTGTCTGATGACGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCGTACCCG 321

QY 336 AAGGTGTCGACGCGGTGTTAGCAGCAGAGATCGGTACCTGACCGCCAGCAGGAGGAC 395

Db 320 AAGGTGTCGACGCGGTGTTAGCAGCAGAGATCGGTACCTGACCGCCAGCAGGAGGAC 261

QY 396 CGCCACGTGTCGACAGGCCAAATTCGCCGATCGATGCGGACGCGTTCGTCGAGCCG 455

Db 260 CGCCACGTGTCGACAGGCCAAATTCGCCGATCGATGCGGACGCGTTCGTCGAGCCG 201

QY 456 CGCGTGTGTCGCGCCGCAAGCGCGGAGGTGAGTACGTGCTGCTGCTGAGGTGAGAC 515

Db 200 CGCGTGTGTCGCGCCGCAAGCGCGGAGGTGAGTACGTGCTGCTGCTGAGGTGAGAC 141

QY 516 TACATGGAGCTCTCGCCCGCCAGATGTTGTCGTCGTCGACCGCGATGATTCCTTCCTG 575

Db 140 TACATGGAGCTCTCGCCCGCCAGATGTTGTCGTCGTCGACCGCGATGATTCCTTCCTG 81

QY 576 GAGCAGCAGACGCCCAACCGTGCCTCATGCGGGGCAAAACATGACGCGCCAGCGGTGCG 635

Db 80 GAGCAGCAGACGCCCAACCGTGCCTCATGCGGGGCAAAACATGACGCGCCAGCGGTGCG 21

QY 636 CTGGTCGTAGCAGGCCCC 655

Db 20 CTGGTCGTAGCAGGCCCC 1

RESULT 14

US-09-940-925A-136

; Sequence 136, Application US/09940925A

; Publication No. US20030054338A1

GENERAL INFORMATION:

APPLICANT: BROW, MARY ANN D.

LYAMICHEV, VICTOR I.

OLIVE, DAVID M.

TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

NUMBER OF SEQUENCES: 165

CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN & CARROLL

STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/940,925A

FILING DATE: 10-Jun-2002

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: CARROLL, PETER G.

REGISTRATION NUMBER: 32,837

REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 136:

SEQUENCE CHARACTERISTICS:

LENGTH: 620 base pairs

TYPE: nucleic acid

STRANDEDNESS: double

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

SEQUENCE DESCRIPTION: SEQ ID NO: 136:

US-09-940-925A-136

```
Query Match      87.7%; Score 618.4; DB 10; Length 620;
Best Local Similarity 99.8%; Pred. No. 1.2e-150;
Matches 619; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 36 ATCAACATCCGGCGGTGTCGCCGATCAAGAGATTCTTCGGCACCAGCCAGCTGAGC 95
D 1 ATCAACATCCGGCGGTGTCGCCGATCAAGAGATTCTTCGGCACCAGCCAGCTGAGC 60

QY 96 CAATTATGACACAGAAACACCGCTGTCGGGTTGACCCACAAAGCGCGACTGTCGGC 155
D 61 CAATTATGACACAGAAACACCGCTGTCGGGTTGACCCACAAAGCGCGACTGTCGGC 120

QY 156 CTGGGGCCGGCGGTCTGTACGTGAGCGTCCGGGCTGGAGTCCGGAGTGCAGCGTCAACCG 215
D 121 CTGGGGCCGGCGGTCTGTACGTGAGCGTCCGGGCTGGAGTCCGGAGTGCAGCGTCAACCG 180

QY 216 TCGCACTACGGCCGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
D 181 TCGCACTACGGCCGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

QY 276 GCGTCTGCTGCTGACCGCGGTGTCACCGGTTCCGGTTTCATCGAAACCGCGTACCGC 335
D 241 GCGTCTGCTGCTGACCGCGGTGTCACCGGTTCCGGTTTCATCGAAACCGCGTACCGC 300

QY 336 AAGGTGGTCGACGGCGTGTGTCAGCAGATCGGTGACCGCGCGAGGAGGAC 395
D 301 AAGGTGGTCGACGGCGTGTGTCAGCAGATCGGTGACCGCGCGAGGAGGAC 360

QY 396 CGCCACGTGGTGACAGCCCAATTCCCGATCGATGCGGACGCTCGCTTCGTGAGCGC 455
D 361 CGCCACGTGGTGACAGCCCAATTCCCGATCGATGCGGACGCTCGCTTCGTGAGCGC 420

QY 456 CGCGTCTGCTGCTGACCGCGGAGGTGAGTACGTCCTCTGTTAGGTGAGC 515
D 421 CGCGTCTGCTGCTGACCGCGGAGGTGAGTACGTCCTCTGTTAGGTGAGC 480

QY 516 TACATGGACGCTCGCCCGCCAGATGTCGCTGGCCACCGCGATGATTCCTTCCTG 575
D 481 TACATGGACGCTCGCCCGCCAGATGTCGCTGGCCACCGCGATGATTCCTTCCTG 540

QY 576 GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCAAAATGACGCGCCAGCGGTGCGC 635
D 541 GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCAAAATGACGCGCCAGCGGTGCGC 600

QY 636 CTGGTCCGTAGCGAGGCCCC 655
D 601 CTGGTCCGTAGCGAGGCCCC 620
```

RESULT 15

US-09-940-925A-137
; Sequence 137, Application US/09940925A
; Publication No. US20030054338A1
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; LVAMICHEV, VICTOR I.

; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESS: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104

; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/940,925A
FILING DATE: 10-Jun-2002
CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:
NAME: CARROLL, PETER G.
REGISTRATION NUMBER: 32,837
REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 137:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)
SEQUENCE DESCRIPTION: SEQ ID NO: 137:
US-09-940-925A-137

```
Query Match      87.7%; Score 618.4; DB 10; Length 620;
Best Local Similarity 99.8%; Pred. No. 1.2e-150;
Matches 619; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 36 ATCAACATCCGGCGGTGTCGCCGATCAAGAGATTCTTCGGCACCAGCCAGCTGAGC 95
D 1 ATCAACATCCGGCGGTGTCGCCGATCAAGAGATTCTTCGGCACCAGCCAGCTGAGC 60

QY 96 CAATTATGACACAGAAACACCGCTGTCGGGTTGACCCACAAAGCGCGACTGTCGGC 155
D 61 CAATTATGACACAGAAACACCGCTGTCGGGTTGACCCACAAAGCGCGACTGTCGGC 120

QY 156 CTGGGGCCGGCGGTCTGTACGTGAGCGTCCGGGCTGGAGTCCGGAGTGCAGCGTCAACCG 215
D 121 CTGGGGCCGGCGGTCTGTACGTGAGCGTCCGGGCTGGAGTCCGGAGTGCAGCGTCAACCG 180

QY 216 TCGCACTACGGCCGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
D 181 TCGCACTACGGCCGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

QY 276 GCGTCTGCTGCTGACCGCGGTGTCACCGGTTCCGGTTTCATCGAAACCGCGTACCGC 335
D 241 GCGTCTGCTGCTGACCGCGGTGTCACCGGTTCCGGTTTCATCGAAACCGCGTACCGC 300

QY 336 AAGGTGGTCGACGGCGTGTGTCAGCAGATCGGTGACCGCGCGAGGAGGAC 395
D 301 AAGGTGGTCGACGGCGTGTGTCAGCAGATCGGTGACCGCGCGAGGAGGAC 360

QY 396 CGCCACGTGGTGACAGCCCAATTCCCGATCGATGCGGACGCTCGCTTCGTGAGCGC 455
D 361 CGCCACGTGGTGACAGCCCAATTCCCGATCGATGCGGACGCTCGCTTCGTGAGCGC 420

QY 456 CGCGTCTGCTGCTGACCGCGGAGGTGAGTACGTCCTCTGTTAGGTGAGC 515
D 421 CGCGTCTGCTGCTGACCGCGGAGGTGAGTACGTCCTCTGTTAGGTGAGC 480

QY 516 TACATGGACGCTCGCCCGCCAGATGTCGCTGGCCACCGCGATGATTCCTTCCTG 575
D 481 TACATGGACGCTCGCCCGCCAGATGTCGCTGGCCACCGCGATGATTCCTTCCTG 540

QY 576 GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCAAAATGACGCGCCAGCGGTGCGC 635
D 541 GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCAAAATGACGCGCCAGCGGTGCGC 600

QY 636 CTGGTCCGTAGCGAGGCCCC 655
D 601 CTGGTCCGTAGCGAGGCCCC 620
```

Search completed: August 25, 2005, 11:35:28
Job time : 453.661 secs

This Page Blank (uspio)

Result No.	Score	Query		DB	ID	Description
		Match	Length			
1	705	100.0	705	9	US-09-285-306-4	Sequence 4, Appli
2	705	100.0	705	9	US-09-285-306-5	Sequence 5, Appli
3	705	100.0	705	9	US-09-285-306-6	Sequence 6, Appli
4	705	100.0	705	9	US-09-285-306-7	Sequence 7, Appli
5	705	100.0	705	9	US-09-285-306-8	Sequence 8, Appli
6	705	100.0	705	9	US-09-285-306-9	Sequence 9, Appli
7	705	100.0	705	9	US-09-285-306-12	Sequence 12, Appli

QY 61 CGATCAAGGAGTTCTTTCGGCACCGACAGCTGTGCCAGTTCATGAGCAGAACACCGC 120
Db |||||
61 CGATCAAGGAGTTCTTTCGGCACCGACAGCTGTGCCAGTTCATGAGCAGAACACCGC 120
QY |||||
121 TGTGGGGCTCACCCAAAGCGCGCTGTGCGGCTGGGCGGGTGTGTGCCGG 180
Db |||||
121 TGTGGGGCTCACCCAAAGCGCGCTGTGCGGCTGGGCGGGTGTGTGCCGG 180
QY |||||
181 AGCGGGCGGGTGTGAGTTCGCGACGTGCAACCGTCCACTACGGCGGATGTGCCGA 240
Db |||||
181 AGCGGGCGGGTGTGAGTTCGCGACGTGCAACCGTCCACTACGGCGGATGTGCCGA 240
QY |||||
241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGTGTGATCGCGGG 300
Db |||||
241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGTGTGATCGCGGG 300
QY |||||
301 TCAACCGTTTCGGGTTTCATGAGACCGGTACCGCAAGGTGGTTCAGCGGCTGTCA 360
Db |||||
301 TCAACCGTTTCGGGTTTCATGAGACCGGTACCGCAAGGTGGTTCAGCGGCTGTCA 360
QY |||||
361 ACAGATCCACTACTGACCGCCGACGAGGAGGACCGCCAGTGTGTGCGCAGCCAACT 420
Db |||||
361 ACAGATCCACTACTGACCGCCGACGAGGAGGACCGCCAGTGTGTGCGCAGCCAACT 420
QY |||||
421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCGGGTCTGTTCGCCGCAAGCG 480
Db |||||
421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCGGGTCTGTTCGCCGCAAGCG 480
QY |||||
481 GCGAGGTCGAGTACGTGCGCTTCCTCGAGCAGCAGCCAAACCGTGGCC 600
Db |||||
481 GCGAGGTCGAGTACGTGCGCTTCCTCGAGCAGCAGCCAAACCGTGGCC 600
QY |||||
601 TGATGGGCGCAACATGACGCGCCAGCGGTTCCGCTGTGTCGAGCAGCGCGCTGG 660
Db |||||
601 TGATGGGCGCAACATGACGCGCCAGCGGTTCCGCTGTGTCGAGCAGCGCGCTGG 660
QY |||||
661 TGGGACCGGATGAGAGTTCGCGCGCGGATGAGCGGGCGACGT 705
Db |||||
661 TGGGACCGGATGAGAGTTCGCGCGCGGATGAGCGGGCGACGT 705

RESULT 2
US-09-285-306-5
; Sequence 5, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 5
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-5
Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCCAGGAGCTGAGGCGATCACCGCAGACCCCTGATCAACATCGTCCAGTGTGGCGG 60
|||

Db 1 CCCAGGAGCTGAGGCGATCACCGCAGACCCCTGATCAACATCGTCCAGTGTGGCGG 60
QY |||||
61 CGATCAAGGAGTTCTTTCGGCACCGACAGCTGTGCCAGTTCATGAGCAGAACACCGC 120
Db |||||
61 CGATCAAGGAGTTCTTTCGGCACCGACAGCTGTGCCAGTTCATGAGCAGAACACCGC 120
QY |||||
121 TGTGGGGCTCACCCAAAGCGCGCTGTGCGGCTGGGCGGGTGTGTGCCGG 180
Db |||||
121 TGTGGGGCTCACCCAAAGCGCGCTGTGCGGCTGGGCGGGTGTGTGCCGG 180
QY |||||
181 AGCGGGCGGGTGTGAGTTCGCGACGTGCAACCGTCCACTACGGCGGATGTGCCGA 240
Db |||||
181 AGCGGGCGGGTGTGAGTTCGCGACGTGCAACCGTCCACTACGGCGGATGTGCCGA 240
QY |||||
241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGTGTGATCGCGGG 300
Db |||||
241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGTGTGATCGCGGG 300
QY |||||
301 TCAACCGTTTCGGGTTTCATGAGACCGGTACCGCAAGGTGGTTCAGCGGCTGTCA 360
Db |||||
361 ACAGATCCACTACTGACCGCGACGAGGAGGACCGCCAGTGTGTGCGCAGCCAACT 420
Db |||||
361 ACAGATCCACTACTGACCGCGACGAGGAGGACCGCCAGTGTGTGCGCAGCCAACT 420
QY |||||
421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCGGGTCTGTTCGCCGCAAGCG 480
Db |||||
421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCGGGTCTGTTCGCCGCAAGCG 480
QY |||||
481 GCGAGGTCGAGTACGTGCGCTTCCTCGAGGTCGACTACATGAGCGTGTTCGCCGCGC 540
Db |||||
481 GCGAGGTCGAGTACGTGCGCTTCCTCGAGGTCGACTACATGAGCGTGTTCGCCGCGC 540
QY |||||
541 TGTGTGCTGGGCGCACCGCGATGATCCGTTCTTCGAGCAGCAGCGCCAAACCGTGG 600
Db |||||
541 TGTGTGCTGGGCGCACCGCGATGATCCGTTCTTCGAGCAGCAGCGCCAAACCGTGG 600
QY |||||
601 TGATGGGCGCAACATGACGCGCCAGCGGTTCCGCTGTGTCGAGCAGCGCGCTGG 660
Db |||||
601 TGATGGGCGCAACATGACGCGCCAGCGGTTCCGCTGTGTCGAGCAGCGCGCTGG 660
QY |||||
661 TGGGACCGGATGAGAGTTCGCGCGCGGATGAGCGGGCGACGT 705
Db |||||
661 TGGGACCGGATGAGAGTTCGCGCGCGGATGAGCGGGCGACGT 705

RESULT 3
US-09-285-306-6
; Sequence 6, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-6
Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCCAGGAGCTGAGGCGATCACCGCAGACCCCTGATCAACATCGTCCAGTGTGGCGG 60
|||

```
QY 1 CCCAGGACGTGGAGGCGATCACACGCGACAGACCTTGATCAACATCCGTCCAGTCTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACACGCGACAGACCTTGATCAACATCCGTCCAGTCTGGCGG 60
QY 61 CGATCAAGGAGTCTTTCGGCACGACGCTGTCCAGTTTCATGGACAGAACACCCGCG 120
Db 61 CGATCAAGGAGTCTTTCGGCACGACGCTGTCCAGTTTCATGGACAGAACACCCGCG 120
QY 121 TGTCCGGGCTACCCACAAGCCCGCTGTCCGGCTGGCCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTACCCACAAGCCCGCTGTCCGGCTGGCCCGGGTGGTCTGTCCCGGG 180
QY 181 AGCGGGCCGGGCTGAGGTCCCGACGTGCACCCGTCCACCTACCGCCGAGTGTCCCGGA 240
Db 181 AGCGGGCCGGGCTGAGGTCCCGACGTGCACCCGTCCACCTACCGCCGAGTGTCCCGGA 240
QY 241 TCGAGACCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCGGG 300
Db 241 TCGAGACCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTGACCGGCTGTGCACG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTGACCGGCTGTGCACG 360
QY 361 ACGAGATCCACTACCTGACCGCGGAGGACCGCCACGTGGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGGAGGACCGCCACGTGGTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACGACAAGGCGCGGTTCCGGAGGCGCGGTGTGGTCCGCGCAAGGCGG 480
Db 421 CGCCGATCGACGACAAGGCGCGGTTCCGGAGGCGCGGTGTGGTCCGCGCAAGGCGG 480
QY 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGAATACATGACGTGTGCGCGGCCAGA 540
Db 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGAATACATGACGTGTGCGCGGCCAGA 540
QY 541 TGGTCTCGGTGGCCACCGCGATGATCCGTTTCTCGAGCACGACGCCACCGTGGCC 600
Db 541 TGGTCTCGGTGGCCACCGCGATGATCCGTTTCTCGAGCACGACGCCACCGTGGCC 600
QY 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGTGGTGGCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGTGGTGGCGAGGCGCGCTGG 660
QY 661 TGGGCACCGCATGAGCTGCGCGCGGATCGACGCGCGGACGT 705
Db 661 TGGGCACCGCATGAGCTGCGCGCGGATCGACGCGCGGACGT 705
```

RESULT 4

```
US-09-285-306-7
; Sequence 7, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-7
```

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;

```
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCCAGGACGTGGAGGCGATCACACGCGACAGACCTTGATCAACATCCGTCCAGTCTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACACGCGACAGACCTTGATCAACATCCGTCCAGTCTGGCGG 60
QY 61 CGATCAAGGAGTCTTTCGGCACGACGCTGTCCAGTTTCATGGACAGAACACCCGCG 120
Db 61 CGATCAAGGAGTCTTTCGGCACGACGCTGTCCAGTTTCATGGACAGAACACCCGCG 120
QY 121 TGTCCGGGCTACCCACAAGCCCGCTGTCCGGCTGGCCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTACCCACAAGCCCGCTGTCCGGCTGGCCCGGGTGGTCTGTCCCGGG 180
QY 181 AGCGGGCCGGGCTGAGGTCCCGACGTGCACCCGTCCACCTACCGCCGAGTGTCCCGGA 240
Db 181 AGCGGGCCGGGCTGAGGTCCCGACGTGCACCCGTCCACCTACCGCCGAGTGTCCCGGA 240
QY 241 TCGAGACCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCGGG 300
Db 241 TCGAGACCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTGACCGGCTGTGCACG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTGACCGGCTGTGCACG 360
QY 361 ACGAGATCCACTACCTGACCGCGGAGGACCGCCACGTGGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGGAGGACCGCCACGTGGTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACGACAAGGCGCGGTTCCGGAGGCGCGGTGTGGTCCGCGCAAGGCGG 480
Db 421 CGCCGATCGACGACAAGGCGCGGTTCCGGAGGCGCGGTGTGGTCCGCGCAAGGCGG 480
QY 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGAATACATGACGTGTGCGCGGCCAGA 540
Db 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGAATACATGACGTGTGCGCGGCCAGA 540
QY 541 TGGTCTCGGTGGCCACCGCGATGATCCGTTTCTCGAGCACGACGCCACCGTGGCC 600
Db 541 TGGTCTCGGTGGCCACCGCGATGATCCGTTTCTCGAGCACGACGCCACCGTGGCC 600
QY 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGTGGTGGCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGTGGTGGCGAGGCGCGCTGG 660
QY 661 TGGGCACCGCATGAGCTGCGCGCGGATCGACGCGCGGACGT 705
Db 661 TGGGCACCGCATGAGCTGCGCGCGGATCGACGCGCGGACGT 705
```

RESULT 5

```
US-09-285-306-8
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-8
```

```
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGATCACCGCAGACCCCTGATCAACATCGTCCAGTCTGGCGG 60
Db 1 CCCAGGACGTGGAGCGATCACCGCAGACCCCTGATCAACATCGTCCAGTCTGGCGG 60

Qy 61 CGATCAAGAGGTTCTTCCGACCAAGCCAGTGTCCAGTTCATGACACAGAACACCGC 120
Db 61 CGATCAAGAGGTTCTTCCGACCAAGCCAGTGTCCAGTTCATGACACAGAACACCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCCGGGCTGGGCCCCGGTGGTCTGTCCCGG 180
Db 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCCGGGCTGGGCCCCGGTGGTCTGTCCCGG 180

Qy 181 AGCGGGCCGGGCTGGAGTTCGAGACCGTGCACCCGCTCCCACTACGGCCGGATGTCCCGA 240
Db 181 AGCGGGCCGGGCTGGAGTTCGAGACCGTGCACCCGCTCCCACTACGGCCGGATGTCCCGA 240

Qy 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTCCGGTGTATGCGGG 300
Db 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTCCGGTGTATGCGGG 300

Qy 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGGTGCAGCGGCTGGTCAACG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGGTGCAGCGGCTGGTCAACG 360

Qy 361 ACGAGATCCACTACTGACCCCGCAGAGGAGGACCCGCTCCCTACGCGGCGGCAACT 420
Db 361 ACGAGATCCACTACTGACCCCGCAGAGGAGGACCCGCTCCCTACGCGGCGGCAACT 420

Qy 421 CGCGATCGACGACAAGGGCCGGTTCGCGAGGCGCGGTTCCGCGAGGCGCGGTTCTGGTCCGCGCAAGCGG 480
Db 421 CGCGATCGACGACAAGGGCCGGTTCGCGAGGCGCGGTTCCGCGAGGCGCGGTTCTGGTCCGCGCAAGCGG 480

Qy 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGAGACGAGCGCCGCGCAGA 540
Db 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGAGACGAGCGCCGCGCAGA 540

Qy 541 TGGTGTCCGGTGGCCACCGCGATGATCCGTTCTTCGAGCAGCAGCCCAACCGTGCCC 600
Db 541 TGGTGTCCGGTGGCCACCGCGATGATCCGTTCTTCGAGCAGCAGCCCAACCGTGCCC 600

Qy 601 TGATGGGGCCCAACATGACGCGCCAGCGGTTCCGCTGGTCCGAGCGAGCGCGCTGG 660
Db 601 TGATGGGGCCCAACATGACGCGCCAGCGGTTCCGCTGGTCCGAGCGAGCGCGCTGG 660

Qy 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
```

RESULT 6

US-09-285-306-9

; Sequence 9, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; EARLIER APPLICATION NUMBER: 1999-04-02

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 9

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-9

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 8.2e-156;

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy 1 CCCAGGACGTGGAGCGATCACCGCAGACCCCTGATCAACATCGTCCAGTCTGGCGG 60
Db 1 CCCAGGACGTGGAGCGATCACCGCAGACCCCTGATCAACATCGTCCAGTCTGGCGG 60

Qy 61 CGATCAAGAGGTTCTTCCGACCAAGCCAGTGTCCAGTTCATGACACAGAACACCGC 120
Db 61 CGATCAAGAGGTTCTTCCGACCAAGCCAGTGTCCAGTTCATGACACAGAACACCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCCGGGCTGGGCCCCGGTGGTCTGTCCCGG 180
Db 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCCGGGCTGGGCCCCGGTGGTCTGTCCCGG 180

Qy 181 AGCGGGCCGGGCTGGAGTTCGAGACCGTGCACCCGCTCCCACTACGGCCGGATGTCCCGA 240
Db 181 AGCGGGCCGGGCTGGAGTTCGAGACCGTGCACCCGCTCCCACTACGGCCGGATGTCCCGA 240

Qy 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTCCGGTGTATGCGGG 300
Db 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTCCGGTGTATGCGGG 300

Qy 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGGTGCAGCGGCTGGTCAACG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGGTGGTGCAGCGGCTGGTCAACG 360

Qy 361 ACGAGATCCACTACTGACCCCGCAGAGGAGGACCCGCTCCCTACGCGGCGGCAACT 420
Db 361 ACGAGATCCACTACTGACCCCGCAGAGGAGGACCCGCTCCCTACGCGGCGGCAACT 420

Qy 421 CGCGATCGACGACAAGGGCCGGTTCGCGAGGCGCGGTTCCGCGAGGCGCGGTTCTGGTCCGCGCAAGCGG 480
Db 421 CGCGATCGACGACAAGGGCCGGTTCGCGAGGCGCGGTTCCGCGAGGCGCGGTTCTGGTCCGCGCAAGCGG 480

Qy 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGAGACGAGCGCCGCGCAGA 540
Db 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGAGACGAGCGCCGCGCAGA 540

Qy 541 TGGTGTCCGGTGGCCACCGCGATGATCCGTTCTTCGAGCAGCAGCCCAACCGTGCCC 600
Db 541 TGGTGTCCGGTGGCCACCGCGATGATCCGTTCTTCGAGCAGCAGCCCAACCGTGCCC 600

Qy 601 TGATGGGGCCCAACATGACGCGCCAGCGGTTCCGCTGGTCCGAGCGAGCGCGCTGG 660
Db 601 TGATGGGGCCCAACATGACGCGCCAGCGGTTCCGCTGGTCCGAGCGAGCGCGCTGG 660

Qy 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
```

RESULT 7

US-09-285-306-12

; Sequence 12, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; EARLIER APPLICATION NUMBER: 1999-04-02

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 12

; LENGTH: 705

```
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-12

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGAGCTGAGGCGATCACACGCGAGACCTGATCAACATCCGTTCAGTCTGTTGGCGG 60
   |||||
Db 1 CCCAGAGCTGAGGCGATCACACGCGAGACCTGATCAACATCCGTTCAGTCTGTTGGCGG 60
   |||||
Qy 61 CGATCAAGAGTTCTTCGGCACCGACGCTGCTCCAGTTTCATGACGACAGAACACCCGC 120
   |||||
Db 61 CGATCAAGAGTTCTTCGGCACCGACGCTGCTCCAGTTTCATGACGACAGAACACCCGC 120
   |||||
Qy 121 TGTGGGGCTCACCCACAAAGCGCCGCTGTTCGGCGCTGGGCCGGGTGTTCTGTCCCGGG 180
   |||||
Db 121 TGTGGGGCTCACCCACAAAGCGCCGCTGTTCGGCGCTGGGCCGGGTGTTCTGTCCCGGG 180
   |||||
Qy 181 AGCGGGCGGGTGGAGTTCGCGAGCTGCAACCGTCCCACTACGCGCGGATGTCCCGGA 240
   |||||
Db 181 AGCGGGCGGGTGGAGTTCGCGAGCTGCAACCGTCCCACTACGCGCGGATGTCCCGGA 240
   |||||
Qy 241 TCGAGACCCCGAGGTTCCAAATCGTCTGATCGGCTCGCTGTCGGTGTATGCGCGGG 300
   |||||
Db 241 TCGAGACCCCGAGGTTCCAAATCGTCTGATCGGCTCGCTGTCGGTGTATGCGCGGG 300
   |||||
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTCGACGCGCGTGTACCG 360
   |||||
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTCGACGCGCGTGTACCG 360
   |||||
Qy 361 ACGAGATCCACTACTGACCGCGAGAGGAGGACCGGCACTGTTGGCGAGGCGCAACT 420
   |||||
Db 361 ACGAGATCCACTACTGACCGCGAGAGGAGGACCGGCACTGTTGGCGAGGCGCAACT 420
   |||||
Qy 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGAGGCGCGGTTGCTGTCGGCGCAAGGCGG 480
   |||||
Db 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGAGGCGCGGTTGCTGTCGGCGCAAGGCGG 480
   |||||
Qy 481 GCGAGTTCGAGTACGTCGCTCGCGAGGTGGAATACATGACGCTGTCGCGCGCCAGA 540
   |||||
Db 481 GCGAGTTCGAGTACGTCGCTCGCGAGGTGGAATACATGACGCTGTCGCGCGCCAGA 540
   |||||
Qy 541 TGGTGTGGTGCGCACCGCGATGATCCCGTTCTTCGAGGAGGACTACATGAGCTGTCGCGCGCCAGA 600
   |||||
Db 541 TGGTGTGGTGCGCACCGCGATGATCCCGTTCTTCGAGGAGGACTACATGAGCTGTCGCGCGCCAGA 600
   |||||
Qy 601 TGATGGCGCGCAACATGACGCGCGAGGCGGTTCCGCTGTCGCGAGGCGCGCTGG 660
   |||||
Db 601 TGATGGCGCGCAACATGACGCGCGAGGCGGTTCCGCTGTCGCGAGGCGCGCTGG 660
   |||||
Qy 661 TGGGCACCGGATGAGCTGCGCGCGGCGATCGACGCGCGGACGT 705
   |||||
Db 661 TGGGCACCGGATGAGCTGCGCGCGGCGATCGACGCGCGGACGT 705
   |||||
```

RESULT 8

```
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
```

```
; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-13

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGAGCTGAGGCGATCACACGCGAGACCTGATCAACATCCGTTCAGTCTGTTGGCGG 60
   |||||
Db 1 CCCAGAGCTGAGGCGATCACACGCGAGACCTGATCAACATCCGTTCAGTCTGTTGGCGG 60
   |||||
Qy 61 CGATCAAGAGTTCTTCGGGACCGAGCCAGCTGTCCAGTTTCATGACGACAGAACACCCGC 120
   |||||
Db 61 CGATCAAGAGTTCTTCGGGACCGAGCCAGCTGTCCAGTTTCATGACGACAGAACACCCGC 120
   |||||
Qy 121 TGTGGGGCTCACCCACAAAGCGCGCTGTTCGGCGCTGGGCCGGGTGTTCTGTCCCGGG 180
   |||||
Db 121 TGTGGGGCTCACCCACAAAGCGCGCTGTTCGGCGCTGGGCCGGGTGTTCTGTCCCGGG 180
   |||||
Qy 181 AGCGGGCGGGTGGAGTTCGCGAGCTGCAACCGTCCCACTACGCGCGGATGTCCCGGA 240
   |||||
Db 181 AGCGGGCGGGTGGAGTTCGCGAGCTGCAACCGTCCCACTACGCGCGGATGTCCCGGA 240
   |||||
Qy 241 TCGAGACCCCGAGGTTCCAAATCGTCTGATCGGCTCGCTGTCGGTGTATGCGCGGG 300
   |||||
Db 241 TCGAGACCCCGAGGTTCCAAATCGTCTGATCGGCTCGCTGTCGGTGTATGCGCGGG 300
   |||||
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTCGACGCGCGTGTACCG 360
   |||||
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGTCGACGCGCGTGTACCG 360
   |||||
Qy 361 ACGAGATCCACTACTGACCGCGAGAGGAGGACCGGCACTGTTGGCGAGGCGCAACT 420
   |||||
Db 361 ACGAGATCCACTACTGACCGCGAGAGGAGGACCGGCACTGTTGGCGAGGCGCAACT 420
   |||||
Qy 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGAGGCGCGGTTGCTGTCGGCGCAAGGCGG 480
   |||||
Db 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGAGGCGCGGTTGCTGTCGGCGCAAGGCGG 480
   |||||
Qy 481 GCGAGTTCGAGTACGTCGCTCGCGAGGTGGAATACATGACGCTGTCGCGCGCCAGA 540
   |||||
Db 481 GCGAGTTCGAGTACGTCGCTCGCGAGGTGGAATACATGACGCTGTCGCGCGCCAGA 540
   |||||
Qy 541 TGGTGTGGTGCGCACCGCGATGATCCCGTTCTTCGAGGAGGACTACATGAGCTGTCGCGCGCCAGA 600
   |||||
Db 541 TGGTGTGGTGCGCACCGCGATGATCCCGTTCTTCGAGGAGGACTACATGAGCTGTCGCGCGCCAGA 600
   |||||
Qy 601 TGATGGCGCGCAACATGACGCGCGAGGCGGTTCCGCTGTCGCGAGGCGCGCTGG 660
   |||||
Db 601 TGATGGCGCGCAACATGACGCGCGAGGCGGTTCCGCTGTCGCGAGGCGCGCTGG 660
   |||||
Qy 661 TGGGCACCGGATGAGCTGCGCGCGGCGATCGACGCGCGGACGT 705
   |||||
Db 661 TGGGCACCGGATGAGCTGCGCGCGGCGATCGACGCGCGGACGT 705
   |||||
```

RESULT 9

```
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
```

; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CCCAGGACGTGGAGCGATCAACCGCAGACCCCTGTATCAACATCCGTCAGTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGATCAACCGCAGACCCCTGTATCAACATCCGTCAGTCGTGGCGG 60
Qy 61 CGATCAAGGAGTTCTTCCGACACGACCGCTGTCCAGTTTCATGGACAGAACCCGC 120
Db 61 CGATCAAGGAGTTCTTCCGACACGACCGCTGTCCAGTTTCATGGACAGAACCCGC 120
Qy 121 TGTGGGGCTCACCAACAGCGCGCTGTCCGGCTGGGCGGGTGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCAACAGCGCGCTGTCCGGCTGGGCGGGTGTCTGTCCCGGG 180
Qy 181 AGCGGGCGGGCTGGAGTCCGCGACGTGCAACCGTCCCACTACGGCGGATGTGCCCGA 240
Db 181 AGCGGGCGGGCTGGAGTCCGCGACGTGCAACCGTCCCACTACGGCGGATGTGCCCGA 240
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGGTCTGCTGTATCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGGTCTGCTGTATCGCGGG 300
Qy 301 TCAACCCGTTCCGGTTCATCGAGACGCGTACCGCAAGGTGGTCGACGGGTGTACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACGCGTACCGCAAGGTGGTCGACGGGTGTACCG 360
Qy 361 ACGAGATCCACTACTCGACCGCAGCAGGAGGACCGCAGTGGTGGCGCAGGCCAACT 420
Db 361 ACGAGATCCACTACTCGACCGCAGCAGGAGGACCGCAGTGGTGGCGCAGGCCAACT 420
Qy 421 CGCCGATCGACGCAAGGGCCGGTTCGGGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480
Db 421 CGCCGATCGACGCAAGGGCCGGTTCGGGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480
Qy 481 GCGAGGTCGAGTACGTGCGCTCGTCCGAGTGGACTACATGGAGCTGTCCGCGCCAGA 540
Db 481 GCGAGGTCGAGTACGTGCGCTCGTCCGAGTGGACTACATGGAGCTGTCCGCGCCAGA 540
Qy 541 TGGTGTCCGTGGCCACCGCATGATCCCGTTCTCTCGAGCAGCAGCAGCAGCCGTCGCC 600
Db 541 TGGTGTCCGTGGCCACCGCATGATCCCGTTCTCTCGAGCAGCAGCAGCAGCCGTCGCC 600
Qy 601 TGATGGGCGCAACATGACGCGCCAGCGGTTCGCTGGTGGCGAGGCGCGCGTGG 660
Db 601 TGATGGGCGCAACATGACGCGCCAGCGGTTCGCTGGTGGCGAGGCGCGCGTGG 660
Qy 661 TGGGACCGGCATGGAGCTGGCGCGCGCATCGACGCGGCACT 705
Db 661 TGGGACCGGCATGGAGCTGGCGCGCGCATCGACGCGGCACT 705

RESULT 10

US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-16

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CCCAGGACGTGGAGCGATCAACCGCAGACCCCTGTATCAACATCCGTCAGTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGATCAACCGCAGACCCCTGTATCAACATCCGTCAGTCGTGGCGG 60
Qy 61 CGATCAAGGAGTTCTTCCGACACGACCGCTGTCCAGTTTCATGGACAGAACCCGC 120
Db 61 CGATCAAGGAGTTCTTCCGACACGACCGCTGTCCAGTTTCATGGACAGAACCCGC 120
Qy 121 TGTGGGGCTCACCAACAGCGCGCTGTCCGGCTGGGCGGGTGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCAACAGCGCGCTGTCCGGCTGGGCGGGTGTCTGTCCCGGG 180
Qy 181 AGCGGGCGGGCTGGAGTCCGCGACGTGCAACCGTCCCACTACGGCGGATGTGCCCGA 240
Db 181 AGCGGGCGGGCTGGAGTCCGCGACGTGCAACCGTCCCACTACGGCGGATGTGCCCGA 240
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGGTCTGCTGTATCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGGTCTGCTGTATCGCGGG 300
Qy 301 TCAACCCGTTCCGGTTCATCGAGACGCGTACCGCAAGGTGGTCGACGGGTGTACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACGCGTACCGCAAGGTGGTCGACGGGTGTACCG 360
Qy 361 ACGAGATCCACTACTCGACCGCAGCAGGAGGACCGCAGTGGTGGCGCAGGCCAACT 420
Db 361 ACGAGATCCACTACTCGACCGCAGCAGGAGGACCGCAGTGGTGGCGCAGGCCAACT 420
Qy 421 CGCCGATCGACGCAAGGGCCGGTTCGGGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480
Db 421 CGCCGATCGACGCAAGGGCCGGTTCGGGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480
Qy 481 GCGAGGTCGAGTACGTGCGCTCGTCCGAGTGGACTACATGGAGCTGTCCGCGCCAGA 540
Db 481 GCGAGGTCGAGTACGTGCGCTCGTCCGAGTGGACTACATGGAGCTGTCCGCGCCAGA 540
Qy 541 TGGTGTCCGTGGCCACCGCATGATCCCGTTCTCTCGAGCAGCAGCAGCAGCCGTCGCC 600
Db 541 TGGTGTCCGTGGCCACCGCATGATCCCGTTCTCTCGAGCAGCAGCAGCAGCCGTCGCC 600
Qy 601 TGATGGGCGCAACATGACGCGCCAGCGGTTCGCTGGTGGCGAGGCGCGCGTGG 660
Db 601 TGATGGGCGCAACATGACGCGCCAGCGGTTCGCTGGTGGCGAGGCGCGCGTGG 660
Qy 661 TGGGACCGGCATGGAGCTGGCGCGCGCATCGACGCGGCACT 705
Db 661 TGGGACCGGCATGGAGCTGGCGCGCGCATCGACGCGGCACT 705

RESULT 11

US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 24
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-24

Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 8.2e-156; Indels 0; Gaps 0;
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	CCAGAGCGTGGAGCGGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCCAGTCTGGGCGG	60
Db	1	CCAGAGCGTGGAGCGGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCTGGGCGG	60
Qy	61	CGATCAAGGAGTCTTTCGGCACCAGCAGCTGTCCAGTTCATGACAGAACACCCGC	120
Db	61	CGATCAAGGAGTCTTTCGGCACCAGCAGCTGTCCAGTTCATGACAGAACACCCGC	120
Qy	121	TGTCGGGCGTCAACCAAGCGCCCTGTGGGCGCTGGGCGCTGGGCGTCTGTCCCGG	180
Db	121	TGTCGGGCGTCAACCAAGCGCCCTGTGGGCGCTGGGCGCTGGGCGTCTGTCCCGG	180
Qy	181	AGCGGCGCGGCTGAGGTCGCGAGCTGCGACCTGCCCTCCACTACCGCGCGATGTGCCGA	240
Db	181	AGCGGCGCGGCTGAGGTCGCGAGCTGCGACCTGCCCTCCACTACCGCGCGATGTGCCGA	240
Qy	241	TCGAGACCCCGAGGTCGCAACATCGGTCTGATCGGTCGCTGCGGTGTATGCGCGG	300
Db	241	TCGAGACCCCGAGGTCGCAACATCGGTCTGATCGGTCGCTGCGGTGTATGCGCGG	300
Qy	301	TCAACCCGTTGGGTTTCATCGAGACCGCTACCGCAAGGTGTCACCGGCGTCAACG	360
Db	301	TCAACCCGTTGGGTTTCATCGAGACCGCTACCGCAAGGTGTCACCGGCGTCAACG	360
Qy	361	ACGAGATCCACTACCTGACCGCGCAGAGGAGCCGCAAGTGTGGCGGAGGCCAACT	420
Db	361	ACGAGATCCACTACCTGACCGCGCAGAGGAGCCGCAAGTGTGGCGGAGGCCAACT	420
Qy	421	CGCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCGGTCGTCGCGCGCAAGGCGG	480
Db	421	CGCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCGGTCGTCGCGCGCAAGGCGG	480
Qy	481	CGGAGGTCGAGTACGTCGCTCCGAGGTCGACTACATGACGTCGTCGCGCGCCAGA	540
Db	481	CGGAGGTCGAGTACGTCGCTCCGAGGTCGACTACATGACGTCGTCGCGCGCCAGA	540
Qy	541	TGGTGTGGTGCCACCGCGATGATCCCGTTCTCGAGCAGACGACGCCAACCGTGCC	600
Db	541	TGGTGTGGTGCCACCGCGATGATCCCGTTCTCGAGCAGACGACGCCAACCGTGCC	600
Qy	601	TGATGGGCGCCAAATGACGAGCGCCAGGCGGTTCCGCTGGTCGACGAGGCGCGTGG	660
Db	601	TGATGGGCGCCAAATGACGAGCGCCAGGCGGTTCCGCTGGTCGACGAGGCGCGTGG	660
Qy	661	TGGGCAACCGGATGAGTCGCGCGCGCGATCGACGCGGCGACGT	705
Db	661	TGGGCAACCGGATGAGTCGCGCGCGCGATCGACGCGGCGACGT	705

RESULT 12
 US-09-285-306-17
 ; Sequence 17, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 17
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-17

Query Match 99.8%; Score 703.4; DB 9; Length 705;
 Best Local Similarity 99.9%; Pred. No. 1.9e-15; Indels 0; Gaps 0;
 Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy	1	CCAGAGCGTGGAGCGGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCTGGGCGG	60
Db	1	CCAGAGCGTGGAGCGGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCTGGGCGG	60
Qy	61	CGATCAAGGAGTCTTTCGGCACCAGCAGCTGTCCAGTTCATGACAGAACACCCGC	120
Db	61	CGATCAAGGAGTCTTTCGGCACCAGCAGCTGTCCAGTTCATGACAGAACACCCGC	120
Qy	121	TGTCGGGCGTCAACCAAGCGCCCTGTGGGCGCTGGGCGCTGGTCTGTCCCGG	180
Db	121	TGTCGGGCGTCAACCAAGCGCCCTGTGGGCGCTGGGCGCTGGTCTGTCCCGG	180
Qy	181	AGCGGCGCGGCTGAGGTCGCGAGCTGCGACCTGCCCTCCACTACCGCGCGATGTGCCGA	240
Db	181	AGCGGCGCGGCTGAGGTCGCGAGCTGCGACCTGCCCTCCACTACCGCGCGATGTGCCGA	240
Qy	241	TCGAGACCCCGAGGTCGCAACATCGGTCTGATCGGTCGCTGCGGTGTATGCGCGG	300
Db	241	TCGAGACCCCGAGGTCGCAACATCGGTCTGATCGGTCGCTGCGGTGTATGCGCGG	300
Qy	301	TCAACCCGTTGGGTTTCATCGAGACCGCTACCGCAAGGTGTCACCGGCGTCAACG	360
Db	301	TCAACCCGTTGGGTTTCATCGAGACCGCTACCGCAAGGTGTCACCGGCGTCAACG	360
Qy	361	ACGAGATCCACTACCTGACCGCGCAGAGGAGCCGCAAGTGTGGCGGAGGCCAACT	420
Db	361	ACGAGATCCACTACCTGACCGCGCAGAGGAGCCGCAAGTGTGGCGGAGGCCAACT	420
Qy	421	CGCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCGGTCGTCGCGCGCAAGGCGG	480
Db	421	CGCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCGGTCGTCGCGCGCAAGGCGG	480
Qy	481	CGGAGGTCGAGTACGTCGCTCCGAGGTCGACTACATGACGTCGTCGCGCGCCAGA	540
Db	481	CGGAGGTCGAGTACGTCGCTCCGAGGTCGACTACATGACGTCGTCGCGCGCCAGA	540
Qy	541	TGGTGTGGTGCCACCGCGATGATCCCGTTCTCGAGCAGACGACGCCAACCGTGCC	600
Db	541	TGGTGTGGTGCCACCGCGATGATCCCGTTCTCGAGCAGACGACGCCAACCGTGCC	600
Qy	601	TGATGGGCGCCAAATGACGAGCGCCAGGCGGTTCCGCTGGTCGACGAGGCGCGTGG	660
Db	601	TGATGGGCGCCAAATGACGAGCGCCAGGCGGTTCCGCTGGTCGACGAGGCGCGTGG	660
Qy	661	TGGGCAACCGGATGAGTCGCGCGCGCGATCGACGCGGCGACGT	705
Db	661	TGGGCAACCGGATGAGTCGCGCGCGCGATCGACGCGGCGACGT	705

RESULT 13
 US-09-285-306-3
 ; Sequence 3, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingeras, Thomas

```

; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
;
; NAME/KEY: modified_base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
;
US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 1.8e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGGCGATCACCGGACGAGCCCTGATCAACATCGTCCAGTCTGTGGCGG 60
Db 1 CCCAGGAGCTGGAGGCGATCACCGGACGAGCCCTGATCAACATCGTCCAGTCTGTGGCGG 60

Qy 61 CGATCAAGAGGATCTTCCGGACACGAGCCAGCTGTCCAGTTTCATCGACACGAGCAACCCGC 120
Db 61 CGATCAAGAGGATCTTCCGGACACGAGCCAGCTGTCCAGTTTCATCGACACGAGCAACCCGC 120

Qy 121 TGTGGGGCTCACCCACAAGCCGCTGTTCGGGCGCTGGGCGCGGGTGTGTCTGCCCGG 180
Db 121 TGTGGGGCTCACCCACAAGCCGCTGTTCGGGCGCTGGGCGCGGGTGTGTCTGCCCGG 180

Qy 181 AGCGGGCGGGCTGGAGTTCGGACGACGTCGACCGTCCCTACCTAGCGCGGATGTCCCGA 240
Db 181 AGCGGGCGGGCTGGAGTTCGGACGACGTCGACCGTCCCTACCTAGCGCGGATGTCCCGA 240

Qy 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATCGCGGG 300
Db 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATCGCGGG 300

Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCGACGGGTTGTACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCGACGGGTTGTACCG 360

Qy 361 ACAGATCCACTACTGACCCGACGAGGAGGACCGGACGTCGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCCGACGAGGAGGACCGGACGTCGTGGTGGCGAGGCCAACT 420

Qy 421 CGCCGATCGACGCAAGGGCCGGTTCGGGAGGCGCCGGTCTGCTCGCCGCAAGCGG 480
Db 421 CGCCGATCGACGCAAGGGCCGGTTCGGGAGGCGCCGGTCTGCTCGCCGCAAGCGG 480

Qy 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGACNTTKTCSCCGCGCCARA 540
Db 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGACNTTKTCSCCGCGCCARA 540

Qy 541 TGGTTCGGTGGCCACCGCGATGATCCGGTTCTCGAGCAGCAGCGCCACCGTGGCC 600
Db 541 TGGTTCGGTGGCCACCGCGATGATCCGGTTCTCGAGCAGCAGCGCCACCGTGGCC 600

Qy 601 TGATGGGCGCCAAATGACGAGCCAGCGGTTCGGCTGGTGGCGAGGAGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACGAGCCAGCGGTTCGGCTGGTGGCGAGGAGCGCGCTGG 660

Qy 661 TGGGACCGGCATGGAGTTCGCGCGGCGCATCGACGCGGGGACGT 705
```

```

Db 661 TGGCACCGGCATGGAGTTCGCGCGGCGCATCGACGCGGACGT 705

RESULT 14
US-09-285-306-11
; Sequence 11, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
;
; NAME/KEY: modified_base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
;
US-09-285-306-11

Query Match      98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 4.3e-153;
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGGCGATCACCGGACGAGCCCTGATCAACATCGTCCAGTCTGTGGCGG 60
Db 1 CCCAGGAGCTGGAGGCGATCACCGGACGAGCCCTGATCAACATCGTCCAGTCTGTGGCGG 60

Qy 61 CGATCAAGAGGATCTTTCGGACACGAGCCAGCTGTCCAGTTTCATGGACACGAGCAACCCGC 120
Db 61 CGATCAAGAGGATCTTTCGGACACGAGCCAGCTGTCCAGTTTCATGGACACGAGCAACCCGC 120

Qy 121 TGTGGGGCTCACCCACAAGCCGCTGTTCGGGCGCTGGGCGCGGGTGTGTCTGCCCGG 180
Db 121 TGTGGGGCTCACCCACAAGCCGCTGTTCGGGCGCTGGGCGCGGGTGTGTCTGCCCGG 180

Qy 181 AGCGGGCGGGCTGGAGTTCGGACGACGTCGACCGTCCCTACCTAGCGCGGATGTCCCGA 240
Db 181 AGCGGGCGGGCTGGAGTTCGGACGACGTCGACCGTCCCTACCTAGCGCGGATGTCCCGA 240

Qy 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATCGCGGG 300
Db 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATCGCGGG 300

Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCGACGGGTTGTACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCGACGGGTTGTACCG 360

Qy 361 ACAGATCCACTACTGACCCGACGAGGAGGACCGGACGTCGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCCGACGAGGAGGACCGGACGTCGTGGTGGCGAGGCCAACT 420

Qy 421 CGCCGATCGACGCAAGGGCCGGTTCGGGAGGCGCCGGTCTGCTCGCCGCAAGCGG 480
Db 421 CGCCGATCGACGCAAGGGCCGGTTCGGGAGGCGCCGGTCTGCTCGCCGCAAGCGG 480

Qy 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGACNTTKTCSCCGCGCCARA 540
Db 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGACNTTKTCSCCGCGCCARA 540

Qy 661 TGGGACCGGCATGGAGTTCGCGCGGCGCATCGACGCGGGGACGT 705
```

```
QY 541 TGGTGTCCGTGCGCCACCGGATGATCCCGTTCTCGAGCAGCAGCAGCCCAACCGTGC 600
Db |||||
QY 541 TGGTGTCCGTGCGCCACCGGATGATCCCGTTCTCGAGCAGCAGCAGCCCAACCGTGC 600
Db |||||
QY 601 TGATGGCGCCCAACATGACAGCCCAAGCGGTTCCGCTGGTGGCGAGCGAGGCGCCGCTGG 660
Db |||||
QY 601 TGATGGCGCCCAACATGACAGCCCAAGCGGTTCCGCTGGTGGCGAGCGAGGCGCCGCTGG 660
QY 661 TGGGCACCGGCATGAGCTGCGCGCGCGCGATCGACGCGGCGACGT 705
Db |||||
QY 661 TGGGCACCGGCATGAGCTGCGCGCGCGCGATCGACGCGGCGACGT 705
```

RESULT 15

US-09-285-306-10

; Sequence 10, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gengeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 10

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-10

```
Query Match          98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 1.6e-152;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;
```

```
QY 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCTGTGGCGG 60
Db 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCGTCGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTCGGCACCAGCGAGCTGTCCAGTTCAATGACACAGAACACCCGC 120
Db 61 CGATCAAGAGGTTCTTCGGCACCAGCGAGCTGTCCAGTTCAATGACACAGAACACCCGC 120
QY 121 TGTCCGGGCTCACCAAGCGCGCTGTCCGGCGCTGGCGCGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCAAGCGCGCTGTCCGGCGCTGGCGCGGTGGTCTGTCCCGGG 180
QY 181 AGCGGGCGGGCTGGAGGTCGCCGACGTGCACCGCTGCCACTACCGCGCGGATGTGCCCGA 240
Db 181 AGCGGGCGGGCTGGAGGTCGCCGACGTGCACCGCTGCCACTACCGCGCGGATGTGCCCGA 240
QY 241 TCGAGACCCCGAGAGGTCCTCAACATCGGTCGTGATCGGTCGCTGTCGGTGTATCGCGGG 300
Db 241 TCGAGACCCCGAGAGGTCCTCAACATCGGTCGTGATCGGTCGCTGTCGGTGTAYGCGGG 300
QY 301 TCACCCGCTCGGGTTTCATCGAGAGCGCGTACCGCAAGGTGGTGCACGCGGTGTACCG 360
Db 301 TSAACCCGCTCGGGTTTCATCGAGAGACCCGCTACCGCAAGGTGGTGTGTGTACCG 360
QY 361 ACGAGATCCACTACCTGACCCGCGCAGAGGAGCGCACGCTGGTGGCGAGGCGCAACT 420
Db 361 ACGAGATCCACTACCTGACCCGCGCAGAGGAGCGCACGCTGGTGGCGAGGCGCAACT 420
QY 421 CGCCGATCGACGACAAGGCGCGGTTTCGCGAGGCGCGGTCGTGTCGCCCGCAAGCGG 480
Db 421 CGCCGATCGACGACAAGGCGCGGTTTCGAGAGGKCCCGGGTGTGTGTCGCCGSAAGCGG 480
QY 481 GCGAGGTGCGATGACGTGCCCTCGTCCGAGGTGGACTACATGAGCGTGTCCGCGGCCAGA 540
```

Search completed: August 25, 2005, 11:35:32

Job time : 453.661 secs

This Page Blank (uspo1o)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds
(without alignments)
11150.034 Million cell updates/sec

Title: US-09-285-306-5

Perfect score: 705

Sequence: 1 cccagcgctgagcgatc.....ggcgatcgagcgcgacgt 705

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA:
1: /cgn2_6/ptodata/1/ina/5A COMB.seq:
2: /cgn2_6/ptodata/1/ina/5B COMB.seq:
3: /cgn2_6/ptodata/1/ina/6A COMB.seq:
4: /cgn2_6/ptodata/1/ina/6B COMB.seq:
5: /cgn2_6/ptodata/1/ina/PCTUS COMB.seq:
6: /cgn2_6/ptodata/1/ina/backfiles1.seq:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	85.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	3	US-08-520-946-135
11	530.4	75.2	620	3	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	3	US-08-520-946-136
19	528.8	75.0	620	3	US-08-520-946-137
20	528.8	75.0	620	3	US-08-520-946-139
21	528.8	75.0	620	3	US-08-520-946-140
22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	411	58.3	5099	4	US-09-887-052-1

ALIGNMENTS

RESULT 1

US-08-797-812-24

; Sequence 24, Application US/08797812

; Patent No. 6228575

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas A.

; APPLICANT: Mack, David

; APPLICANT: Chee, Mark S.

; APPLICANT: Berno, Anthony J.

; APPLICANT: Strayer, Lubert

; APPLICANT: Ghandour, Ghassan

; APPLICANT: Wang, Ching

; TITLE OF INVENTION: Chip-Based Species Identification and

; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms

; NUMBER OF SEQUENCES: 36

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Townsend and Townsend and Crew LLP

; STREET: Two Embarcadero Center, 8th Floor

; CITY: San Francisco

; STATE: CA

; COUNTRY: USA

; ZIP: 94111

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/797,812

; FILING DATE: 07-FEB-1997

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/017,765

; FILING DATE: 15-MAY-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/629,031

; FILING DATE: 08-APR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/012,631

; FILING DATE: 01-MAR-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/011,339

; FILING DATE: 08-FEB-1996

; ATTORNEY/AGENT INFORMATION:

; NAME: Fitts, Renee A.

; REGISTRATION NUMBER: 35,136

; REFERENCE/DOCKET NUMBER: 16528X-018550

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 415-326-2400

; TELEFAX: 415-326-2422

Sequence 3, Appli
Sequence 5, Appli
Sequence 8919, Ap
Sequence 951, App
Sequence 4737, Ap
Sequence 4771, Ap
Sequence 22, Appl
Sequence 30, Appl
Sequence 59, Appl
Sequence 59, Appl
Sequence 36, Appl
Sequence 36, Appl
Sequence 1097, Ap
Sequence 3177, Ap
Sequence 20, Appl
Sequence 35, Appl
Sequence 35, Appl
Sequence 401, App

28 409.4 58.1 5099 4 US-09-887-052-3
29 409.4 58.1 5099 4 US-09-887-052-5
30 402 4227 4 US-09-902-540-8919
C 31 402 9367 4 US-09-902-540-951
C 32 371.2 52.7 4074 4 US-09-252-991A-4737
33 371.2 52.7 4092 4 US-09-252-991A-4771
34 337.2 47.8 4083 4 US-09-489-039A-22
C 35 337.2 47.8 4206 4 US-09-489-039A-30
36 293.4 41.6 432 2 US-08-313-185-59
37 293.4 41.6 432 3 US-09-082-614A-59
38 286.2 40.6 324 3 US-08-750-088A-36
39 286.2 40.6 324 4 US-09-722-319-36
40 265.2 37.6 2964 4 US-09-540-236-1097
41 265.2 37.6 4167 4 US-09-543-681A-3177
42 265.2 37.6 31063 4 US-09-596-002-20
43 255.6 36.3 319 3 US-08-750-088A-35
44 255.6 36.3 319 4 US-09-722-319-35
C 45 249.8 35.4 11935 4 US-09-634-238-401

; INFORMATION FOR SEQ ID NO: 24:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 706 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: cDNA

US-08-797-812-24

Query Match 86.6%; Score 610.6; DB 3; Length 706;

Best Local Similarity 91.6%; Pred. No. 1.1e-118;

Matches 646; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

```
Qy 1 CCCAGAGCTGGAGCGATCAACCGCAGACCCCTGATCAACATCCGTCACGTCGTGGCGG 60
Db 2 CCCAGAGCTGGAGCGATCAACCGCAGACCGTGTGATCAACATCCGCGCGTGTGCGCG 61
Qy 61 CGATCAAGAGTTCTTTCGGCCACGACCGACGCTGTCCAGTTTCATGACACAGAACACCGC 120
Db 62 CGATCAAGAGTTCTTTCGGCCACGACCGACGCTGTGAGCCAAATTCATGACACAGAACACCGC 121
Qy 121 TGTGGGGCTCACCCACAAGCGCCCTGTTCGGCGCTGGGGCCCGGGTGTCTGTCCCGGG 180
Db 122 TGTGGGGTTGACCCACAAGCGCCGACTGTTCGGCGCTGGGGCCCGGGTGTCTGTACGCTG 181
Qy 181 AGCGGGCCGGGTGGAGTTCGCGACGCTGCACCCGCTCCCACTACGGCCGGATGTGCCCGA 240
Db 182 AGCGTCCGGGTGGAGTTCGCGACGCTGCACCCGCTGCACCTACGGCCGGATGTGCCCGA 241
Qy 241 TCGAGACCCCGGAGGGTCCCAACATCGTCTGTATCGCGTTCGCTGTGGTGTATGCGCGGG 300
Db 242 TCGAAACCCCTGAGGGGCCAACATCGGCTCTGATCGGCTCGCTGTTCGGTGTACGCGGGG 301
Qy 301 TCACCCCGTTCGGGTTTCATCAGAGCGCGTACCGACGAGTGGTTCGAGCGGCTGTCAACG 360
Db 302 TCACCCCGTTCGGGTTTCATCAGAAACCGCGTACCGCAAGTGGTTCGAGCGGCTGTGTAGCG 361
Qy 361 ACGAGATCCACTTACCTGACCCCGACGAGGAGGACCGCACGTCGTGTGGCGCAGGCCAACT 420
Db 362 ACGAGATCGTGTACTGACCCCGACGAGGAGGACCGCACGTCGTGTGGCACAGGCCAAAT 421
Qy 421 CGCGATCGACGACAAAGGGCGGTTCGCGAGGCGCGGTGCTGTGCGCGCGCGCGCAGGCGG 480
Db 422 CGCGATCGATCGCGAGCGTTCGTCGTCGAGCGCGCGTGTGCTGTGCGCGCGCGCGCAGGCGG 481
Qy 481 GCGAGTCTGAGTACGTCCTCTCCGAGTGGACTACATGAGCTGTTCGCGCGCGCGCAGG 540
Db 482 GCGAGTGGAGTACGTCCTCTCTGAGTGGACTACATGAGCTGTTCGCGCGCGCGCAGG 541
Qy 541 TGGTGTCTGGTGGCCACCGCGATGATCCCGTTTCCTCGAGCAGCAGACGCCAACCGTGCCT 600
Db 542 TGGTGTCTGGTGGCCACCGCGATGATTCCTTCTTGGAGCAGCAGCGCCAACCGTGCCT 601
Qy 601 TGATGGGCGCCAAATGACGCGCAGCGGTTCGCTGTGGTGTGCGAGGAGCGCGCTGG 660
Db 602 TCATGGGGGCAAAATGACGCGCAGCGGTTCGCTGTGGTGTGCGAGGAGCGCGCTGG 661
Qy 661 TGGGCACCGGATGGAGTTCGCGCGCGCGATCGACGCGGCACT 705
Db 662 TGGGCACCGGATGGAGTTCGCGCGCGCGATCGACGCGGCACT 706
```

RESULT 2

US-09-103-840A-2

; Sequence 2, Application US/09103840A

; Patent No. 6294328

; GENERAL INFORMATION:

; APPLICANT: FLEISCHMAN, Robert D.

; APPLICANT: WHITE, Owen R.

; APPLICANT: FRASER, Claire M.

; APPLICANT: VENTER, John C.

; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM

; TITLE OF INVENTION: TUBERCULOSIS

; FILE REFERENCE: 24366-20007.00

; CURRENT APPLICATION NUMBER: US/09/103,840A

; CURRENT FILING DATE: 1998-06-24

; NUMBER OF SEQ ID NOS: 2

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 2

; LENGTH: 4403765

; TYPE: DNA

; ORGANISM: Mycobacterium tuberculosis

; FEATURE:

; OTHER INFORMATION: CDC 1551

; OTHER INFORMATION: "n" bases at various positions throughout the sequence

; OTHER INFORMATION: represent a, t, c or g

US-09-103-840A-2

Query Match 85.5%; Score 603; DB 3; Length 4403765;

Best Local Similarity 91.4%; Pred. No. 1.2e-116;

Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

```
Qy 1 CCCAGAGCTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCACGTCGTGGCGG 60
Db 762963 CCCAGAGCTGGAGCGGATCACACCGCAGAGCTTGATCAACATCCGCGCGTGTGCGCG 763022
Qy 61 CGATCAAGAGTTCTTTCGGCACCCAGCCAGCTGTCCAGTTTCATGACACAGAACACCGC 120
Db 763023 CGATCAAGAGTTCTTTCGGCACCCAGCCAGCTGTGAGCCAAATTCATGACACAGAACACCGC 763082
Qy 121 TGTGGGGCTCACCCACAAGCGCCCTGTTCGGCGCTGGGGCCCGGGTGTCTGTCCCGGG 180
Db 763083 TGTGGGGTTGACCCACAAGCGCGGACTGTTCGGCGCTGGGGCCCGGGTGTCTGTACGCTG 763142
Qy 181 AGCGGGCCGGCTGGAGTTCGCGACGCTGCACCCGCTCCCACTACGGCCGGATGTGCCCGA 240
Db 763143 AGCGTCCGGGTGGAGTTCGCGACGCTGCACCCGCTCGCACTACGGCCGGATGTGCCCGA 763202
Qy 241 TCGAGACCCCGGAGGGTCCCAACATCGTCTGTATCGGCTCGCTGTTCGGTGTATGCGCGGG 300
Db 763203 TCGAAACCCCTGAGGGGCCCAACATCGGCTCTGATCGGCTCGCTGTTCGGTGTACGCGCGGG 763262
Qy 301 TCACCCCGTTCGGGTTTCATCGAGCGCGCTACCGCAGGAGTGGTTCGAGCGGCTGTCAACG 360
Db 763263 TCACCCCGTTCGGGTTTCATCGAAACCGCGTACCGCAAGTGGTTCGAGCGGCTGTGTAGCG 763322
Qy 361 ACGAGATCCACTTACCTGACCGCGGACGAGGAGGACCGCACGTCGTGTGGCGCAGGCCAACT 420
Db 763323 ACGAGATCGTGTACTGACCCCGGACGAGGAGGACCGCACGTCGTGTGGCACAGGCCAAAT 763382
Qy 421 CGCGATCGACGACAAAGGGCGGTTCGCGAGGCGCGGTGCTGTGCGAGCGCGGGTGTCTGTCCGCGCAAGCGCG 480
Db 763383 CGCGATCGATCGCGACGCTTCGCTTCGAGCGCGCGTTCGTCGAGCGCGCGTGTTCGCGCGCAAGCGCG 763442
Qy 481 GCGAGTCTGAGTACGTCCTCTCTCGAGTGGACTACATGAGCTGTTCGCGCGCGCGCAGG 540
Db 763443 GCGAGTGGAGTACGTCCTCTCTGAGTGGACTACATGAGCTGTTCGCGCGCGCGCAGG 763502
Qy 541 TGGTGTCTGGTGGCCACCGCGATGATCCCGTTTCCTCGAGCAGCAGCAGCCAAACCGTGCCT 600
Db 763503 TGGTGTCTGGTGGCCACCGCGATGATTCCTTCTTGGAGCAGCAGCGCCAAACCGTGCCT 763562
Qy 601 TGATGGGCGCCAAATGACGCGCAGCGGTTCGCTGTGGTGTGCGAGGAGCGCGCTGG 660
Db 763563 TCATGGGGGCAAAATGACGCGCAGCGGTTCGCTGTGGTGTGCGAGGAGCGCGCTGG 763622
Qy 661 TGGGCACCGGATGGAGTTCGCGCGCGCGATCGACGCGG 699
Db 763623 TGGGCACCGGATGGAGTTCGCGCGCGCGATCGACGCGG 763661
```

RESULT 3

US-09-103-840A-1

; Sequence 1, Application US/09103840A

; Patent No. 6294328

; GENERAL INFORMATION:

Query Match	85.5%	Score 603	DB 3	Length 4411529
Best Local Similarity	91.4%	Pred. No. 1.2e-116		
Matches 639	Conservative 0	Mismatches 60	Indels 0	Gaps 0
QY	1	CCCAAGGACGTGGAGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG	60	
DB	761003	CCCAAGGACGTGGAGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG	761062	
QY	61	CGATCAAGGAGTTCTTCGGCACCCAGCCAGCTGTCCAGTTTCATGGACCAACAACCCGC	120	
DB	761063	CGATCAAGGAGTTCTTCGGCACCCAGCCAGCTGTCCAGTTTCATGGACCAACAACCCGC	761122	
QY	121	TGTCGGGGCTCACCAAGCGCCGCTGTGGCGCTGGGCCCGGGTGTCTGTCCCGG	180	
DB	761123	TGTCGGGGTTGACCCACAAGCGCCGACTGTTCGGCGCTGGGGCCGCGCTCTGTACCGT	761182	
QY	181	AGCGGCGCGGCTGGAGGTCCGCGACGTGCACCCGTCCCACTACCGCGCGATGTCGCCA	240	
DB	761183	AGCGTCCGGGCTGGAGTCCGCGACGTGCACCCGTTCGCACTACCGCGCGATGTCGCCA	761242	
QY	241	TCGAGACCCCGAGGGTCCCAACATCGGTCTGTATCGGCTTCGCTGTCGGTGTATGCGCGG	300	
DB	761243	TCGAAACCCCTGAGGGCCCAACATCGGTCTGTATCGGCTTCGCTGTCGGTGTACGCGCGG	761302	
QY	301	TCAACCCGTTCGGGTTTCATCGAGACCCGTTACCGCAAGGTGTTCAACCGCGTGTCAACG	360	
DB	761303	TCAACCCGTTCGGGTTTCATCGAAACCGCGTACCGCAAGGTGTTCAACCGCGTGTAGCG	761362	
QY	361	ACGAGATCCACTACTGACCCGACGAGGAGGACCGCCACTGTTGGCGGAGGCCAAT	420	
DB	761363	ACGAGATCGTTACTGTGACCCCGACGAGGAGGACCGCCACTGTTGGCGGAGGCCAAT	761422	
QY	421	CGCCGATCGAGTACGAGGCGGTTTCGCGAGGCGCGGTTGCTGTCGCGCCAAAGCGG	480	
DB	761423	CGCCGATCGATCGGACGGTTCGTTCTGTCGAGCGCGGTTGCTGTTCCGCGCAAGCGG	761482	
QY	481	GCAGAGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGACGCTGTGCGCGCCACGA	540	
DB	761483	GCAGAGTGGAGTACGTGCCCTCGTCTGAGGTGGACTACATGACGCTGTGCGCGCCACGA	761542	
QY	541	TGTTGTCGTTGGCCACCGGATGATCCCGTTCCTCGAGCAGACGACGCAACCGTGCC	600	
DB	761543	TGTTGTCGTTGGCCACCGGATGATTCCTTCCTGGAGCAGACGACGCAACCGTGCC	761602	
QY	601	TGATGGGCGCAACATGACGAGCGCAGGCGGTTCCGCTGTCGCGACGAGGCGCGCTGG	660	
DB	761603	TCATGGGGGCAACATGACGAGCGCGGCGGTCGCTGTCGTTAGGAGGCGCGCTGG	761662	
QY	661	TGGGACCGGATGAGCTGGCGCGCGGATCGACGCG	699	
DB	761663	TGGGACCGGATGAGCTGGCGCGCGGATCGACGCG	761701	

APPLICANT: FLEISCHMAN, Robert D.

APPLICANT: WHITE, Owen R.

APPLICANT: FRASER, Claire M.

APPLICANT: VENTER, John C.

TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM

TITLE OF INVENTION: TUBERCULOSIS

FILE REFERENCE: 24366-20007.00

CURRENT APPLICATION NUMBER: US/09/103,840A

CURRENT FILING DATE: 1998-06-24

NUMBER OF SEQ ID NOS: 2

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 1

LENGTH: 4411529

TYPE: DNA

ORGANISM: Mycobacterium tuberculosis

OTHER INFORMATION: H37Rv

US-09-103-840A-1

RESULT 4

US-08-313-185-57

```

; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM: disk
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-313-185-57

```

Query Match	79.2%;	Score 558.2;	DB 2;	Length 3447;
Best Local Similarity	87.4%;	Pred. No. 1.1e-107;		
Matches 611;	Conservative 0;	Mismatches 88;	Indels 0;	Gaps 0;
Qy	1	CCGAGACGTGGAGGCGATCACACCCGACAGACCTGATCAACATCCGTCCAGTCCGTGCGCGG	60	
Db	1124	CCGAGACGTGAGGCGGATCACCCGACAGCGTGATCAATATCCGTCCGGTGGTGC	1183	
Qy	61	CGATCAAGGAGTTCTTTTCGGCACCCAGCCAGCGTGTCCAGATTTCATGAGACGAAACACCCGC	120	
Db	1184	CTATCAAGGAATTTCTTCGCGACCCAGCCAGCGTGTGCGAGTTTCATGGATCAGAACACCCCTC	1243	
Qy	121	TGTCGGGGTCAACCCACAGAGCGCGCGCTGTGCGCGCTGTGGCCCGGGTGGTCTGTCCCGGG	180	
Db	1244	TGTTCGGGCGCTGACCCACAAAGCGCGCGCTGTTCGGCGCTGTGGCCCGGGTGGTCTGTCCGCGTG	1303	
Qy	181	AGCGGCGCGGGCTGGAGGCTCCGCGAGCTGCACCCGCTCCACATACGCGCGGATGTGCCCA	240	
Db	1304	AGCGTCCGGGCTAGAGGTTCCGTGAGTGTCACCCCTTCGCACATACGCGCGGATGTGCCCA	1363	
Qy	241	TCGAGACCCCGGAGGGTCCCAACATATCGGCTCTGATTCGGCTTCGCTGTTCGGTGTATTCGCGGG	300	
Db	1364	TCGAGACTCCGAGGGCCCCGAACATAGGTTCTGATTCGGTTCATTGTTCGGTGTACGCGCGG	1423	
Qy	301	TCAACCCGTTTCGGGTTTCATCGAGACGCCGCTACCGCAAGGTGTGTCGACGCGGTTGGTCA	360	
Db	1424	TCAACCCCTTCGGGTTTCATCGAAACACCGTACCGCAAGTGGTTGACGCGTGGTTCAGCG	1483	

RESULT 4
US-08-313-185-57


```

; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/250,030
; FILING DATE: 26-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Muetting, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 150.105U51
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-250-030-1

Query Match 76.7%; Score 540.4; DB 1; Length 970;
Best Local Similarity 91.1%; Pred. No. 5e-104;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCGTCCAGTCTGTCGGCG 60
Db 341 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCGTCCAGTCTGTCGGCG 400

Qy 61 CGATCAAGGAGTTCTTCGGCCACCGCAGCTGTCCAGTTTCATGACCCAGAACACCCGC 120
Db 401 CGATCAAGGAGTTCTTCGGCCACCGCAGCTGTCCAGTTTCATGACCCAGAACACCCGC 460

Qy 121 TGTGGGGCTCACCCACAAGCCGCCCTGTGCGGCGCTGGGCGCGGTGTCTGTCCCGGG 180
Db 461 TGTGGGGTTGACCCACAAGCCGCCACTGTGCGGCGCTGGGCGCGGTGTCTGTCCACGTG 520

Qy 181 AGCGGGCGGCGTGGAGTCCGCGACGTCACCGTCCACTACGCGCGGATGTCGCCGA 240
Db 521 AGCGTGGCGGCTGGAGAGGCGGACGTGACCCGTCGACTACGCGCGGATGTCGCCGA 580

Qy 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTGCGGTATGCGCGG 300
Db 581 TCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTATGCGCGG 640

Qy 301 TCAACCCGTTCCGGTTTCAGAGACGCCGTACCGCAAGGTGTGACGCGGTGTGTACCG 360
Db 641 TCAACCCGTTCCGGTTTCATCGAAACGCCGTACCGCAAGGTGTGACGCGGTGTGTACCG 700

Qy 361 ACGAGATCCACTACTGACCCCGCAGCAGGAGGACCGCCACGTGTGCGCGCAGGCCACT 420
Db 701 ACGAGATCGTGTACCTGACCCCGCAGCAGGAGGACCGCCACGTGTGTGTCACAGGCCAAT 760

Qy 421 CGCCGATCGACGACAAGGCGCGTTCGCGGAGGCGCGGCTGTGCTCGCGCGCAAGGCGG 480
Db 761 CGCCGATCGATGCGGACCGGTGCTTCGTCGAGCGCGGCTGTGCTCGCGCGCAAGGCGG 820

Qy 481 GCGAGGTGAGTACGTGCCCTCGTCCGAGGTGGACTACATGAGACGTGTGCGCGCGCCAGA 540
Db 821 GCGAGGTGAGTACGTGCCCTCGTCTGAGGTGGACTACATGAGACGTGTCTCGCGCGCCAGA 880

Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCTGAGCAGACGACGACGCCAACCGTGC 600
Db 881 TGGTGTCCGTGGCCACCGCGATGATTCCTCTCTGAGCAGACGACGCCAACCGTGC 940

Qy 601 TGATGGGCGCCAAACATGACGCGCCAGGCGG 630
Db 941 TCATGGGGGCAACATGACGCGCCAGGCGG 970
```

```

RESULT 7
PCT-US95-06790-1
; Sequence 1, Application PC/TUS9506790
; GENERAL INFORMATION:
; APPLICANT: Mayo Foundation for Medical Education and Research
; APPLICANT: and Hoffmann-La Roche Inc.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/06790
; FILING DATE: 26-MAY-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Raasch, Kevin W.
; REGISTRATION NUMBER: 35,651
; REFERENCE/DOCKET NUMBER: 150.105W01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
PCT-US95-06790-1
```

```

Query Match 76.7%; Score 540.4; DB 5; Length 970;
Best Local Similarity 91.1%; Pred. No. 5e-104;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCGTCCAGTCTGTCGGCG 60
Db 341 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCGTCCAGTCTGTCGGCG 400

Qy 61 CGATCAAGGAGTTCTTCGGCCACCGCAGCTGTCCAGTTTCATGACCCAGAACACCCGC 120
Db 401 CGATCAAGGAGTTCTTCGGCCACCGCAGCTGTCCAGTTTCATGACCCAGAACACCCGC 460

Qy 121 TGTGGGGCTCACCCACAAGCCGCCCTGTGCGGCGCTGGGCGCGGTGTCTGTCCCGGG 180
Db 461 TGTGGGGTTGACCCACAAGCCGCCACTGTGCGGCGCTGGGCGCGGTGTCTGTACGTG 520

Qy 181 AGCGGGCGGCGTGGAGTCCGCGACGTCACCGTCCACTACGCGCGGATGTCGCCGA 240
Db 521 AGCGTGGCGGCTGGAGAGGCGGACGTGACCCGTCGACTACGCGCGGATGTCGCCGA 580

Qy 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTGCGGTATGCGCGG 300
Db 581 TCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTATGCGCGG 640

Qy 301 TCAACCCGTTCCGGTTTCATGAGACGCCGTACCGCAAGGTGTGTACCGTGTGTACCG 360
Db 641 TCAACCCGTTCCGGTTTCATCGAAACGCCGTACCGCAAGGTGTGTGTGTGTGTACCG 700

Qy 361 ACGAGATCCACTACTGACCCCGCAGCAGGAGGACCGCCACGTGTGCGCGCAGGCCACT 420
```

Db 701 ACAGATCGTGTACTGTACCCGCGAGGAGGACCGCCACGTCGTGTGCGACAGGCCAATT 760
Qy 421 CGCCGATCGACGACAAGGCGCGGTTCGCGGAGGCGCGGGTGTCTGTCCGCGCGCAAGGCG 480
Db 761 CGCCGATCGATGCGGACGGTCTGTCTGTCGAGCGCGGCTGTGTTCGCGCGCAAGGCG 820
Qy 481 CGGAGGTGAGTACGTGCGCCCTGTCGCGAGGTGGAATAACATGACGTCGTCTCGGCCCGCAGA 540
Db 821 CGGAGGTGAGTACGTGCGCCCTGTCGAGGTGGAATAACATGACGTCGTCTCGGCCCGCAGA 880
Qy 541 TGGTGTGCGGTGGCCACCGCGATGATCCGTTCTCTGAGCAGACGACGCGCAACCGTGGCC 600
Db 881 TGGTGTGCGGTGGCCACCGCGATGATCCGTTCTCTGAGCAGACGACGCGCAACCGTGGCC 940
Qy 601 TGATGGGCGCCCAACATGACGCGCCAGGCGG 630
Db 941 TCATGGGCGCAACATGACGCGCCAGGCGG 970

RESULT 8

US-08-757-653-135
; Sequence 135, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-135

Query Match 75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;
Qy 36 ATCAACATCCGTCCAGTCGTGGCGGATCAAGAGTCTTCGCGCACGAGCCAGCTGTCC 95
Db 1 ATCAACATCCGCGCGGTGTGCGCGGATCAAGAGTCTTCGCGCACGAGCCAGCTGAGC 60
Qy 96 CAGTTTCATGGACCAAGCAACCCGCTGCGGGGCTCACCAAGCGCGCCTGTGCGGC 155
Db 61 CAATTTCATGGACCAAGCAACCCGCTGTGCGGGGTTGACCCCAAGCGCGGACTGTGCGGC 120

Qy 156 CTGGCCCGGGTGTCTGTCCCGGAGCGCGGCTCGAGGTCCCGAGCGTGCACCCG 215
Db 121 CTGGGCGCGGGGTCTGTCACTGAGCGTCCCGGGCTCGAGGTCCCGAGCGTGCACCCG 180
Qy 216 TCCCACTACGCGCGGATGTGCGCGATCGAGACCGCGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTGCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
Qy 276 GGCTCGCTGTGCGGTATGCGGGTCAACCCGTTCCGGTTTCATCGAGACGCGTACCGC 335
Db 241 GGCTCGCTGTGCGGTATGCGGGTCAACCCGTTCCGGTTTCATCGAAACGCGGTACCGC 300
Qy 336 AAGTGTGTTCGACGCGGTGTGTCACCGAGATCCACTACCTGACCGCGCGAGGAGGAC 395
Db 301 AAGTGTGTTCGACGCGGTGTGTCACCGAGATCGGTACTCTGACCGCGCGAGGAGGAC 360
Qy 396 CGCCACGTGTGCGCAGGCCAACTCGCCGATCGACCAAGGGCCGGTTCGCGGAGGCC 455
Db 361 CGCCACGTGTGCGCAGGCCAACTCGCCGATCGGTGAGTACGTGCGCTCTGAGGTGGAC 420
Qy 456 CGGTGTGTGTCGCGCGCAAGGCGGAGGTGAGTACGTGCGCTCTGAGGTGGAC 515
Db 421 CGGTGTGTGTCGCGCGCAAGGCGGAGGTGAGTACGTGCGCTCTGAGGTGGAC 480
Qy 516 TACATGGACGTGTGCGCGCGCCAGATGGTGTGCGGTGGCCACCGCGATGATCCCTCTC 575
Db 481 TACATGGACGTGTGCGCGCGCCAGATGGTGTGCGGTGGCCACCGCGATGATCCCTCTC 540
Qy 576 GAGCAGACGACGCCAACCGTGCCTGATGGGCGCCAAATGATGAGCGCCAGGGCGGTTC 635
Db 541 GAGCAGACGACGCCAACCGTGCCTGATGGGCGCCAAATGATGAGCGCCAGGGCGGTTC 600
Qy 636 CTGTCGCGCAGCGAGGCGCC 655
Db 601 CTGTCGCGTAGCGAGGCGCC 620

RESULT 9

US-08-757-653-138/c
; Sequence 138, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:

```

; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match 75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCTGTCGGCGGATCAAGAGATTTCTTCGGACACGACGAGTGTCC 95
Db 620 ATCAACATCCGCGCGGTGTGTCGGCGGATCAAGAGATTTCTTCGGACACGACGAGTGTAGC 561

QY 96 CAGTTCATGAGACAGAAACACCGCTGTCTGGGCTCACCAACAGCGCGCTGTCTGGCG 155
Db 560 CAATTCATGAGACAGAAACACCGCTGTCTGGGCTGTGACCAACAGCGCGCTGTCTGGCG 501

QY 156 CTGGGCGCGGCTGTCTGTCGGGAGCGGCGCGGCTGTGGAGTCCGCGAGTGTGACCCG 215
Db 500 CTGGGCGCGGCGCTGTCTGACGTGAGCGGTGTGCGGCTGTGGAGTCCGCGAGTGTGACCCG 441

QY 216 TCCCACTACGCGCGATGTGCGCGATCGAGACCGCGAGGCTCCCAACATCGTCTGATC 275
Db 440 TCGCACTACGCGCGATGTGCGCGATCGAAACCCCTGAGGGGCGCCCAACATCGTCTGATC 381

QY 276 GCGTCGCTGTGCTGTATGCGCGGTCAACCGGTTTCGGGTTTCATCGAGACGCGTACCGC 335
Db 380 GCGTCGCTGTGCTGTATGCGCGGTCAACCGGTTTCGGGTTTCATCGAAACGCGTACCGC 321

QY 336 AAGTGTGTCGACGCGGTGTACCGACGAGATCCACTACTGACCGCGCGACGAGGAGAC 395
Db 320 AAGTGTGTCGACGCGGTGTAGCGACGAGATCGTGTACTGACCGCGCGACGAGGAGAC 261

QY 396 CGCACGAGTGTGCGCGCGCAACTCGCGGATCGACGACGAGGCGCGTGTGCGGAGGCC 455
Db 260 CGCACGAGTGTGCGCGCGCAACTCGCGGATCGATGCGGAGCGGTGTGCTGTGAGCGC 201

QY 456 CGGCTGTGCTGTCGCGCGAGCGGCGAGTGTGAGTGTGCGGCTGTGCGAGTGTGAC 515
Db 200 CGGCTGTGCTGTCGCGCGAGCGGCGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAG 141

QY 516 TACATGACGAGTGTGCGCGCGCAGATGTGTGCGTGTGCGGACCGCGATGATCCCGTTCCTC 575
Db 140 TACATGACGAGTGTGCGCGCGCAGATGTGTGCGTGTGCGGACCGCGATGATTCCTTCTG 81

QY 576 GAGCAGGAGCGCGCAACCGTGTGCGGCGCGCAACATGAGCGCGCGGCGTTCG 635
Db 80 GAGCAGGAGCGCGCAACCGTGTGCGGCGCGCAACATGAGCGCGCGGCGTTCG 21

QY 636 CTGGTGTGCGCGAGGCGCC 655
Db 20 CTGGTGTGCGCGAGGCGCCC 1

```

```

RESULT 10
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSER: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA

```

```

; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

Query Match 75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCTGTCGGCGGATCAAGAGATTTCTTCGGACACGACGAGTGTCC 95
Db 1 ATCAACATCCGCGCGGTGTGTCGGCGGATCAAGAGATTTCTTCGGACACGACGAGTGTAGC 60

QY 96 CAGTTCATGAGACAGAAACACCGCTGTCTGGGCTCACCAACAGCGCGCTGTCTGGCG 155
Db 61 CAATTCATGAGACAGAAACACCGCTGTCTGGGCTGTGACCAACAGCGCGCTGTCTGGCG 120

QY 156 CTGGGCGCGGCTGTCTGTCGGGAGCGGCGCGGCTGTGGAGTCCGCGAGTGTGACCCG 215
Db 121 CTGGGCGCGGCTGTCTGACGTGAGCGTGTGCGGCTGTGGAGTCCGCGAGTGTGACCCG 180

QY 216 TCCCACTACGCGCGATGTGCGCGATCGAGACCGCGGAGGTCCCAACATCGTCTGATC 275
Db 181 TCGCACATCGGCGCGATGTGCGCGATCGAAACCCCTGAGGGGCGCCCAACATCGTCTGATC 240

QY 276 GCGTCGCTGTGCTGTATGCGCGGTCAACCGGTTTCGGGTTTCATCGAGACGCGCTACCGC 335
Db 241 GCGTCGCTGTGCTGTATGCGCGGTCAACCGGTTTCGGGTTTCATCGAAACCGCTACCGC 300

QY 336 AAGTGTGTCGACGCGGTGTGTCAGAGATCCACTACTGACCGCGCGAGAGGAGAC 395
Db 301 AAGTGTGTCGACGCGGTGTGTAGCGAGATCGTGTACTGTGACCGCGCGAGAGGAGAC 360

QY 396 CGCACGAGTGTGCGCGCGCAACTCGCGGATCGACGACGAGGCGCGTGTGCGGAGGCC 455
Db 361 CGCACGAGTGTGCGCGCGCAACTTCGCGGATCGATGCGGAGCGGTGTGCTGTGAGCGC 420

QY 456 CGGCTGTGCTGTCGCGCGAGCGGCGGAGTGTGAGTGTGCGGCTGTGCGAGTGTGAC 515
Db 421 CGGCTGTGCTGTCGCGCGAGCGGCGGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAG 480

QY 516 TACATGACGAGTGTGCGCGCGCAGATGTGTGCGTGTGCGGACCGCGATGATCCCGTTCCTC 575
Db 481 TACATGACGAGTGTGCGCGCGCAGATGTGTGCGTGTGCGGACCGCGAGTGTTCCTTCTG 540

QY 576 GAGCAGGAGCGCGCAACCGTGTGCGGCGCGCAACATGAGCGCGCGAGCGGTTCG 635
Db 541 GAGCAGGAGCGCGCAACCGTGTGCGGCGCGCAACATGAGCGCGCGAGCGGTTCG 600

QY 636 CTGGTGTGCGCGAGGCGCC 655

```

```

Db      601 CTGCTCCGTAGCGAGGCCCC 620

RESULT 11
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-138

Query Match      75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCAGTCGCGCGCGATCAAGAGATTCTTCGGCACCAGCCAGCTGTCC 95
Db      620 ATCAACATCCGCGCGGTGGTCCGCGATCAAGAGATTCTTCGGCACCAGCCAGCTGAGC 561

Qy      96 CAGTTTCATGACCAAGAAACCCGTCGTGGGGGTCAACCAACAGCGCGCTGTCCGCG 155
Db      560 CAATTTCATGACCAAGAAACCCGTCGTGGGGTTGACCCACAGCGCGACTGTCCGCG 501

Qy      156 CTGGGCCCGGTGTCTGTCTCCGGAGCGCGCGCGCTGGAGGTCCGGAGCTGCACCCG 215
Db      500 CTGGGGCCCGCGGTCTGTCTACGTGAGCGTCCGGGTGGAGGTCCGGAGCTGCACCCG 441

Qy      216 TCCCACTACGCCCGGATGTGCCGATCGAGACCCCGGAGGTCCCAACATCGGTCTGATC 275
Db      440 TCGCACTACGCCCGGATGTGCCGATCGAACCCTCGAGGGGCCCAACATCGGTCTGATC 381

Qy      276 GGCTCGCTGTCCGTTGATCGCGGTCAACCCGTTCCGGTTTCATCGAGACCCGTAACCG 335
Db      380 GGCTCGCTGTCCGTTGATCGCGGTCAACCCGTTCCGGTTTCATCGAAACCCGTAACCG 321

Qy      336 AAGTGTTCGACCGCGGTGGTCACCGACGAGATCACTACTGACCGCGCGACGAGGAGAC 395
Db      320 AAGTGTTCGACCGCGGTGGTTAGCGACGAGATCGTGTACCTGACCTGACCGCGCGAGGAGAC 261

Qy      396 CGCCACGTGTGGCGCAGGCCAACTCCCGATCGACGACAAGGCCCGGTTCCGCGAGGCC 455
Db      260 CGCCACGTGTGGCACAGGCCAATTCCCGATCGATGGGACGCTCGCTTCGTCGAGCGC 201

Qy      456 CGGTGTGTGTCCCGCCGCAAGGGCGGAGGTGAGTACGTGCCCTCGTCGAGGTGAGC 515
Db      200 CGGTGTGTGTCCCGCCGCAAGGGCGGAGGTGAGTACGTGCCCTCGTCGAGGTGAGC 141

Qy      516 TACATGACGTGTCCCGCCGCGCAGATGTTCCGTGGCCACCGGATGATCCCGTTCCTC 575
Db      140 TACATGACGTGTCCCGCCGCGCAGATGTTGTGGTGGCCACCGGATGATTCCTTCTG 81

Qy      576 GAGCAGCAGCAGCCCAACCGTCCCTCATGGCGCCCAACATGACGCGCAGGCGGTTCG 635
Db      80 GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCAAAATGACGCGCCAGCGCGTGC 21

Qy      636 CTGTCGCGCAGCGAGGCCCC 655
Db      20 CTGTCGCTAGCGAGGCCCC 1

RESULT 12
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match      75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCAGTCGCGCGCGATCAAGAGATTCTTCGGCACCAGCCAGCTGTCC 95
Db      1 ATCAACATCCGCGCGGTGGTCCGCGATCAAGAGATTCTTCGGCACCAGCCAGCTGAGC 60

```

QY 96 CAGTTTCATGGACAGCAACCCGCTGTCGGGCTCACCCAAAGCGCGCTGTCGGG 155
DB 61 CAATTCATGGACAGCAACCCGCTGTCGGGCTGACCCAAAGCGCGCTGTCGGG 120
QY 156 CTGGCCCGGGTGCTGTCCTCGGAGAGCGGCGCGGCTGGAGTCCGCGAGCTGCACCG 215
DB 121 CTGGGCGCGGGTCTGTCAGTGAGCGTGCCTGGGCTGGAGTCCGCGAGCTGCACCG 180
QY 216 TCCCTACGCGCGGATGTCCTCGATCGAGACCCCGAGGCTCCAAATCGGTCTGATC 275
DB 181 TCGCTACGCGCGGATGTCCTCGATCGAGACCCCGAGGCTCCAAATCGGTCTGATC 240
QY 276 GCTCGCTGCTGCTGTCCTCGGCTCAACCGTTCGGGTTTCATCGAGCGCGTACCG 335
DB 241 GCTCGCTGCTGCTGTCCTCGGCTCAACCGTTCGGGTTTCATCGAGCGCGTACCG 300
QY 336 AAGTGTGTGCTGCTGTCCTCGGCTCAACCGTTCGGGTTTCATCGAGCGCGTACCG 395
DB 301 AAGTGTGTGCTGCTGTCCTCGGCTCAACCGTTCGGGTTTCATCGAGCGCGTACCG 360
QY 396 CGCCACGCTGCTGCTGTCCTCGGCTCAACCGTTCGGGTTTCATCGAGCGCGTACCG 455
DB 361 CGCCACGCTGCTGCTGTCCTCGGCTCAACCGTTCGGGTTTCATCGAGCGCGTACCG 420
QY 456 CGGCTGCTGCTGCTGTCCTCGGCTCAACCGTTCGGGTTTCATCGAGCGCGTACCG 515
DB 421 CGGCTGCTGCTGCTGTCCTCGGCTCAACCGTTCGGGTTTCATCGAGCGCGTACCG 480
QY 516 TACATGAGCTGCTGCTGTCCTCGGCTCAACCGTTCGGGTTTCATCGAGCGCGTACCG 575
DB 481 TACATGAGCTGCTGCTGTCCTCGGCTCAACCGTTCGGGTTTCATCGAGCGCGTACCG 540
QY 576 GAGCAGCAGCG 635
DB 541 GAGCAGCAGCG 600
QY 636 CTGGTCCGCGAGGCGCG 655
DB 601 CTGGTCCGCGAGGCGCG 620

RESULT 13

US-09-655-378A-138/c
; Sequence 138, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; OLIVE, DAVID M.
; LYAMICHEV, VICTOR I.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 138:
US-09-655-378A-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;
QY 36 ATCAACATCCCTGTCAGTCTGTCGGCGCGATCAAGAGGTTCTTCGGCACCAGCCAGCTGTCC 95
DB 620 ATCAACATCCCGCCGGTGGTCCGCCGATCAAGAGGTTCTTCGGCACCAGCCAGCTGTCC 561
QY 96 CAGTTTCATGGACAGCAACCCGCTGTCGGGCTCACCCAAAGCGCGCTGTCGGCG 155
DB 560 CAATTCATGGACAGCAACCCGCTGTCGGGCTGACCCAAAGCGCGCTGTCGGCG 501
QY 156 CTGGCCCGGGTGCTGTCCTCGGAGAGCGGCGCGGCTGGAGGTCGCGACGTCGACCG 215
DB 500 CTGGGCGCGCGGCTGTCCTGTCAGTGTAGCGGTGTCGGGCTGGAGGTCGCGACGTCGAC 441
QY 216 TCCCACTACGCGCGGATGTCGCCGATCGAGACCCCGGAGGTCCTCAACATCGGTCTGATC 275
DB 440 TCGCACTACGCGCGGATGTCGCCGATCGAAACCTCTGAGGGGCCAATCGGTCTGATC 381
QY 276 GGCTCGCTGTCGTTGTCGCGGGTCAACCGCTTCGGGTTTCATCGAGACCGCTGACCG 335
DB 380 GGCTCGCTGTCGTTGTCGCGGGTCAACCGCTTCGGGTTTCATCGAAACCGCTGACCG 321
QY 336 AAGTGTGTGACGCGGCTGTCACCGAGATTCACCTGACCGCGCGAGAGGAG 395
DB 320 AAGTGTGTGACGCGGCTGTCACCGAGATTCGCTGACCGCGCGAGAGGAG 261
QY 396 CGCCACGCTGTCG 455
DB 260 CGCCACGCTGTCG 201
QY 456 CGGCTGCTGTCG 515
DB 200 CGGCTGCTGTCG 141
QY 516 TACATGAGCTGTCG 575
DB 140 TACATGAGCTGTCG 81
QY 576 GAGCAGCAGCG 635
DB 80 GAGCAGCAGCG 21
QY 636 CTGGTCCGCGAGGCGCG 655
DB 20 CTGGTCCGCGAGGCGCG 1

RESULT 14

US-08-757-653-136
; Sequence 136, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; Thermolabile FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190

```

CORRESPONDENCE ADDRESS:
ADDRESS: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 136:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-136

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 1.3e-101; Indels 0; Gaps 0;
Matches 563; Conservative 0; Mismatches 57;

Qy 36 ATCAACATCCGTCAGTCGTGGCGCGATCAAGAGGTTCTTCGGCACAGCAGCTGTCC 95
Db 1 ATCAACATCCGCGGTGTCGCGGATCAAGAGTTCTTCGGCACAGCAGCTGTCC 60

Qy 96 CAGTTTCATGACACCAAGAACCCCGCTGCGGGGTCAACCAAGCGCGCGCTGTGGCG 155
Db 61 CAATTTCATGACACCAAGAACCCCGCTGCGGGGTGACCTTCAAGCGCGGACTGTGGCG 120

Qy 156 CTGGCGCCGGGTGCTGTCCCGGAGCGCGGCTGAGGTCACCAAGCGCGCGCTGTCCGCG 215
Db 121 CTGGCGCCGGCGGTCTGTACGTAGCGTCCGGGTGAGAGTCCGGACGTGCACCG 180

Qy 216 TCCCACTACGCGCGGATGTGCCGATCAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

Qy 276 GGCTCGCTGTGGTGTATGCGGGTCAACCCGTTCCGGTTCATCGAGCCGCGGTTCGCG 335
Db 576 GAGCACGACGACCAACCCGTTGATGGGCGCCCAACATGACAGCGCCAGGCGGTTCGCG 635

CORRESPONDENCE ADDRESS:
ADDRESS: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 137:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-137

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 1.3e-101; Indels 0; Gaps 0;
Matches 563; Conservative 0; Mismatches 57;

Qy 36 ATCAACATCCGTCAGTCGTGGCGCGATCAAGAGGTTCTTCGGCACAGCAGCTGTCC 95
Db 1 ATCAACATCCGCGGTGTCGCGGATCAAGAGTTCTTCGGCACAGCAGCTGTCC 60

Qy 96 CAGTTTCATGACACCAAGAACCCCGCTGCGGGGTCAACCAAGCGCGCGCTGTGGCG 155
Db 61 CAATTTCATGACACCAAGAACCCCGCTGCGGGGTGACCTTCAAGCGCGGACTGTGGCG 120

Qy 156 CTGGCGCCGGGTGCTGTCCCGGAGCGCGGCTGAGGTCACCAAGCGCGCGCTGTCCGCG 215
Db 121 CTGGCGCCGGCGGTCTGTACGTAGCGTCCGGGTGAGAGTCCGGACGTGCACCG 180

Qy 216 TCCCACTACGCGCGGATGTGCCGATCAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

Qy 276 GGCTCGCTGTGGTGTATGCGGGGTCAACCCGTTCCGGTTCATCGAGCCGCGGTTCGCG 335
Db 576 GAGCACGACGACCAACCCGTTGATGGGCGCCCAACATGACAGCGCCAGGCGGTTCGCG 635

CORRESPONDENCE ADDRESS:
ADDRESS: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 138:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 1.3e-101; Indels 0; Gaps 0;
Matches 563; Conservative 0; Mismatches 57;

Qy 36 ATCAACATCCGTCAGTCGTGGCGCGATCAAGAGGTTCTTCGGCACAGCAGCTGTCC 95
Db 1 ATCAACATCCGCGGTGTCGCGGATCAAGAGTTCTTCGGCACAGCAGCTGTCC 60

Qy 96 CAGTTTCATGACACCAAGAACCCCGCTGCGGGGTCAACCAAGCGCGCGCTGTGGCG 155
Db 61 CAATTTCATGACACCAAGAACCCCGCTGCGGGGTGACCTTCAAGCGCGGACTGTGGCG 120

Qy 156 CTGGCGCCGGGTGCTGTCCCGGAGCGCGGCTGAGGTCACCAAGCGCGCGCTGTCCGCG 215
Db 121 CTGGCGCCGGCGGTCTGTACGTAGCGTCCGGGTGAGAGTCCGGACGTGCACCG 180

Qy 216 TCCCACTACGCGCGGATGTGCCGATCAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

Qy 276 GGCTCGCTGTGGTGTATGCGGGGTCAACCCGTTCCGGTTCATCGAGCCGCGGTTCGCG 335
Db 576 GAGCACGACGACCAACCCGTTGATGGGCGCCCAACATGACAGCGCCAGGCGGTTCGCG 635
```

Db 241 GGCTCGCTGTCGGTGTAACGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCGTACCGC 300
QY 336 AAGGTGGTTCGACGCGGTGGTCAACGACGAGATCCACTACCTGACCGCCGACGAGGAGAC 395
Db 301 AAGGTGGTTCGACGCGGTGGTTCAGCGACGAGATCGTGTACCTGACCGCCGACGAGGAGAC 360
QY 396 CGCCACGTGGTGGCGCAGGCCAACTCGCCGATCGACGACAAAGGGCGGTTTCGCGGAGGCC 455
Db 361 CGCCACGTGGTGGCACAGGCCAATTTCGCCGATCGATGCGGACGGTCGCTTCGTCGAGCG 420
QY 456 CGGGTGGTTCGCGCGCAAGCGCGGCGAGTTCGAGTACGTGCCCTCGTCCGAGGTGGAC 515
Db 421 CGCGTGGTTCGCGCGCAAGCGCGGCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC 480
QY 516 TACATGGACGTTCGCGCGCCGACAGATGGTTCGGTGGCCACCGCGATGATCCCGTTCCTC 575
Db 481 TACATGGACGTTCGCGCGCCGACAGATGGTTCGGTGGCCACCGCGATGATTCCTTCCTG 540
QY 576 GAGCACGACGACGCCCAACCGTGCCCTGATGGCGCCAAACATGCGCGCAGCGCGGTTCGG 635
Db 541 GAGCACGACGACGCCCAACCGTGCCCTCATGGGGGCAAAATGACGCCAGCGCGGTGCCG 600
QY 636 CTGGTGGCAGCGAGGCCCC 655
Db 601 CTGGTCCGTAGCGAGGCCCC 620

Search completed: August 24, 2005, 22:24:35
Job time : 114.459 secs

This Page Blank (uspio)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 21:58:55 ; Search time 451.661 Seconds
(without alignments)
10213.139 Million cell updates/sec

Title: US-09-285-306-5
Perfect score: 705
Sequence: 1 cccaggacgtggaggcgatc.....ggcgatcgacggcgacgt 705

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 1.0

Searched: 7331713 seqs, 327154945 residues

Total number of hits satisfying chosen parameters: 14663426

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications NA:*

- 1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq.*
- 2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq.*
- 3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq.*
- 4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq.*
- 5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq.*
- 6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq.*
- 7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq.*
- 8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq.*
- 9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq.*
- 10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq.*
- 11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq.*
- 12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq.*
- 13: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq.*
- 14: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq.*
- 15: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq.*
- 16: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq.*
- 17: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq.*
- 18: /cgn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq.*
- 19: /cgn2_6/ptodata/1/pubpna/US10G_PUBCOMB.seq.*
- 20: /cgn2_6/ptodata/1/pubpna/US10H_PUBCOMB.seq.*
- 21: /cgn2_6/ptodata/1/pubpna/US10I_PUBCOMB.seq.*
- 22: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
- 23: /cgn2_6/ptodata/1/pubpna/US11A_PUBCOMB.seq.*
- 24: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq.*
- 25: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq.*
- 26: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	705	100.0	705	9	US-09-285-306-4
2	705	100.0	705	9	US-09-285-306-5
3	705	100.0	705	9	US-09-285-306-6
4	705	100.0	705	9	US-09-285-306-7
5	705	100.0	705	9	US-09-285-306-8
6	705	100.0	705	9	US-09-285-306-9
7	705	100.0	705	9	US-09-285-306-12

8	705	100.0	705	9	US-09-285-306-13	Sequence 13, Appl
9	705	100.0	705	9	US-09-285-306-14	Sequence 14, Appl
10	705	100.0	705	9	US-09-285-306-16	Sequence 16, Appl
11	705	100.0	705	9	US-09-285-306-24	Sequence 24, Appl
12	703.4	99.8	705	9	US-09-285-306-17	Sequence 17, Appl
13	695	98.6	705	9	US-09-285-306-3	Sequence 3, Appl
14	693.4	98.4	705	9	US-09-285-306-11	Sequence 11, Appl
15	691	98.0	705	9	US-09-285-306-10	Sequence 10, Appl
16	691	98.0	3444	17	US-10-282-122A-25737	Sequence 25737, A
17	687	97.4	687	9	US-09-285-306-18	Sequence 18, Appl
18	687	97.4	687	9	US-09-285-306-19	Sequence 19, Appl
19	687	97.4	687	9	US-09-285-306-20	Sequence 20, Appl
20	687	97.4	687	9	US-09-285-306-21	Sequence 21, Appl
21	687	97.4	687	9	US-09-285-306-22	Sequence 22, Appl
22	687	97.4	687	9	US-09-285-306-23	Sequence 23, Appl
23	687	97.4	687	9	US-09-285-306-25	Sequence 25, Appl
24	687	97.4	687	9	US-09-285-306-27	Sequence 27, Appl
25	660.2	93.6	705	9	US-09-285-306-143	Sequence 143, App
26	658.6	93.4	705	9	US-09-285-306-144	Sequence 144, App
27	655.4	93.0	705	9	US-09-285-306-87	Sequence 87, Appl
28	655.4	93.0	705	9	US-09-285-306-88	Sequence 88, Appl
29	655.4	93.0	705	9	US-09-285-306-90	Sequence 90, Appl
30	655.4	93.0	705	9	US-09-285-306-92	Sequence 92, Appl
31	655.4	93.0	705	9	US-09-285-306-96	Sequence 96, Appl
32	653.8	92.7	705	9	US-09-285-306-84	Sequence 84, Appl
33	653.8	92.7	705	9	US-09-285-306-86	Sequence 86, Appl
34	653.8	92.7	705	9	US-09-285-306-93	Sequence 93, Appl
35	653.8	92.7	705	9	US-09-285-306-94	Sequence 94, Appl
36	653.8	92.7	705	9	US-09-285-306-95	Sequence 95, Appl
37	652.2	92.5	705	9	US-09-285-306-85	Sequence 85, Appl
38	652.2	92.5	705	9	US-09-285-306-89	Sequence 89, Appl
39	652.2	92.5	705	9	US-09-285-306-91	Sequence 91, Appl
40	652.2	92.5	705	9	US-09-285-306-181	Sequence 181, App
41	642.2	91.1	687	9	US-09-285-306-146	Sequence 146, App
42	642.2	91.1	687	9	US-09-285-306-148	Sequence 148, App
43	637.4	90.4	687	9	US-09-285-306-100	Sequence 100, App
44	635.8	90.2	687	9	US-09-285-306-99	Sequence 99, Appl
45	635.8	90.2	687	9	US-09-285-306-145	Sequence 145, App

ALIGNMENTS

RESULT 1

US-09-285-306-4

; Sequence 4, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingers, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285.306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 4

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-4

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 8.2e-156; Indels 0; Gaps 0;

Matches 705; Conservative 0; Mismatches 0;

Qy 1 CCCAGGACGTGGAGGCGATCACACCGGAGCCCTGTGATCAACATCCGTCCAGTCGTGGCGG 60

Db 1 CCCAGGACGTGGAGGCGATCACACCGGAGCCCTGTGATCAACATCCGTCCAGTCGTGGCGG 60

```
QY 61 CGATCAAGGAGTTCTTCCGACACCGCAGCTGTCCAGTTCATGAGCAGAACACCGC 120
Db 61 CGATCAAGGAGTTCTTCCGACACCGCAGCTGTCCAGTTCATGAGCAGAACACCGC 120
QY 121 TGTCCGGGCTCACCCACAAGCGCCCTGTCCGGCTGGGCGGGTGTCTGTCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCCCTGTCCGGCTGGGCGGGTGTCTGTCCGGG 180
QY 181 AGCGGGCGGGCTGGAGTTCGCGACGTGCACCCGTCCACTACGGCCGGATGCCCCGA 240
Db 181 AGCGGGCGGGCTGGAGTTCGCGACGTGCACCCGTCCACTACGGCCGGATGCCCCGA 240
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGGTCAACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGGTCAACCG 360
QY 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCACGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCACGTGGTGGCGAGGCCAACT 420
QY 421 CGCGATCGACGACAAAGGCGCGTTCGCGAGGCGCCGGTCTGTTCGCGCAAGCGG 480
Db 421 CGCGATCGACGACAAAGGCGCGTTCGCGAGGCGCCGGTCTGTTCGCGCAAGCGG 480
QY 481 GCGAGGTCGAGTACGTGCTCCCTGTCGAGGTGGATACATGAGCGTTCGCGCGCCAGA 540
Db 481 GCGAGGTCGAGTACGTGCTCCCTGTCGAGGTGGATACATGAGCGTTCGCGCGCCAGA 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCCCAACCGTGC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCCCAACCGTGC 600
QY 601 TGATGGGCGCCAAATGACAGCCAGCGGTTCCGCTGTGTCGAGCAGCGCGCGTGG 660
Db 601 TGATGGGCGCCAAATGACAGCGCGGTTCCGCTGTGTCGAGCAGCGCGCGTGG 660
QY 661 TGGGACCGGCATGGAGTTCGCGCGCGATCGAGCGGGGACGT 705
Db 661 TGGGACCGGCATGGAGTTCGCGCGCGATCGAGCGGGGACGT 705
```

RESULT 2

```
US-09-285-306-5
; Sequence 5, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 5
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-5
```

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
QY 1 CCCAGGACGTGGAGCGATCACACCGCAGCCCTGTATCAACATCCGTCCAGTCCGCGG 60
|||||
```

```
Db 1 CCCAGGACGTGGAGCGATCACACCGCAGCCCTGTATCAACATCCGTCCAGTCCGCGG 60
QY 61 CGATCAAGGAGTTCTTCCGACACCGCAGCTGTCCAGTTCATGAGCAGAACACCGC 120
Db 61 CGATCAAGGAGTTCTTCCGACACCGCAGCTGTCCAGTTCATGAGCAGAACACCGC 120
QY 121 TGTCCGGGCTCACCCACAAGCGCCCTGTCCGGCTGGGCGGGTGTCTGTCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCCCTGTCCGGCTGGGCGGGTGTCTGTCCGGG 180
QY 181 AGCGGGCGGGCTGGAGTTCGCGACGTGCACCCGTCCACTACGGCCGGATGCCCCGA 240
Db 181 AGCGGGCGGGCTGGAGTTCGCGACGTGCACCCGTCCACTACGGCCGGATGCCCCGA 240
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGGTCAACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGGTCAACCG 360
QY 361 ACAGATCCACTACTGACCCCGCAGAGGAGACCGCACGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCCCGCAGAGGAGACCGCACGTGGTGGCGAGGCCAACT 420
QY 421 CGCGATCGACGACAAAGGCGCGTTCGCGAGGCGCCGGTCTGTTCGCGCAAGCGG 480
Db 421 CGCGATCGACGACAAAGGCGCGTTCGCGAGGCGCCGGTCTGTTCGCGCAAGCGG 480
QY 481 GCGAGGTCGAGTACGTGCTCCCTGTCGAGGTGGATACATGAGCGTTCGCGCGCCAGA 540
Db 481 GCGAGGTCGAGTACGTGCTCCCTGTCGAGGTGGATACATGAGCGTTCGCGCGCCAGA 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCCCAACCGTGC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCCCAACCGTGC 600
QY 601 TGATGGGCGCCAAATGACAGCCAGCGGTTCCGCTGTGTCGAGCAGCGCGCGTGG 660
Db 601 TGATGGGCGCCAAATGACAGCGCGGTTCCGCTGTGTCGAGCAGCGCGCGTGG 660
QY 661 TGGGACCGGCATGGAGTTCGCGCGCGATCGAGCGGGGACGT 705
Db 661 TGGGACCGGCATGGAGTTCGCGCGCGATCGAGCGGGGACGT 705
```

RESULT 3

```
US-09-285-306-6
; Sequence 6, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-6
```

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Oy 1 CCCAGGAGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGGGGG 60
Db 1 CCCAGGAGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGGGGG 60
Oy 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
Oy 121 TGTCCGGGCTACCCACAAGCGCCCTGTGTGGCGCTGGCCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTACCCACAAGCGCCCTGTGTGGCGCTGGCCCGGGTGGTCTGTCCCGGG 180
Oy 181 AGCGGGCGGGTGTGAGTTCGCGACGTGACCCGCTCCACTACGCGCGGATGTCCCGGA 240
Db 181 AGCGGGCGGGTGTGAGTTCGCGACGTGACCCGCTCCACTACGCGCGGATGTCCCGGA 240
Oy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGGTGTGCGGTGTATGCGCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGGTGTGCGGTGTATGCGCGG 300
Oy 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGGTGTGACCGGCTGTACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGGTGTGACCGGCTGTACCG 360
Oy 361 ACGAGATCCACTACTGACCGCGCAGGAGGACCGCACGTGTGTGCGCAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCGCGCAGGAGGACCGCACGTGTGTGCGCAGGCCAACT 420
Oy 421 CGCGGATCGACGACAAGGGCGGTTTCGGGAGGCGCCGGGTGTGTCGCGCGCAAGGCGG 480
Db 421 CGCGGATCGACGACAAGGGCGGTTTCGGGAGGCGCCGGGTGTGTCGCGCGCAAGGCGG 480
Oy 481 GCGAGGTGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA 540
Db 481 GCGAGGTGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA 540
Oy 541 TGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCGGCGGTTCCGCTGGTGGCAGCGCGCTGG 600
Db 541 TGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCGGCGGTTCCGCTGGTGGCAGCGCGCTGG 600
Oy 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGGTGGCAGCGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGGTGGCAGCGGCGCGCTGG 660
Oy 661 TGGGACCGGATGAGTGTGCGCGCGGCGATGACGCGCGGCGACGT 705
Db 661 TGGGACCGGATGAGTGTGCGCGCGGCGATGACGCGCGGCGACGT 705
```

RESULT 4

```
US-09-285-306-7
; Sequence 7, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-7
```

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;

```
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 1 CCCAGGAGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGGGGG 60
Db 1 CCCAGGAGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGGGGG 60
Oy 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
Oy 121 TGTCCGGGCTACCCACAAGCGCCCTGTGTGGCGCTGGCCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTACCCACAAGCGCCCTGTGTGGCGCTGGCCCGGGTGGTCTGTCCCGGG 180
Oy 181 AGCGGGCGGGTGTGAGTTCGCGACGTGACCCGCTCCACTACGCGCGGATGTCCCGGA 240
Db 181 AGCGGGCGGGTGTGAGTTCGCGACGTGACCCGCTCCACTACGCGCGGATGTCCCGGA 240
Oy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGGTGTGCGGTGTATGCGCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGGTGTGCGGTGTATGCGCGG 300
Oy 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGGTGTGACCGGCTGTACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGGTGTGACCGGCTGTACCG 360
Oy 361 ACGAGATCCACTACTGACCGCGCAGGAGGACCGCACGTGTGTGCGCAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCGCGCAGGAGGACCGCACGTGTGTGCGCAGGCCAACT 420
Oy 421 CGCGGATCGACGACAAGGGCGGTTTCGGGAGGCGCCGGGTGTGTCGCGCGCAAGGCGG 480
Db 421 CGCGGATCGACGACAAGGGCGGTTTCGGGAGGCGCCGGGTGTGTCGCGCGCAAGGCGG 480
Oy 481 GCGAGGTGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA 540
Db 481 GCGAGGTGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA 540
Oy 541 TGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCGGCGGTTCCGCTGGTGGCAGCGCGCTGG 600
Db 541 TGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCGGCGGTTCCGCTGGTGGCAGCGCGCTGG 600
Oy 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGGTGGCAGCGGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGGTGGCAGCGGCGCGCTGG 660
Oy 661 TGGGACCGGATGAGTGTGCGCGCGGCGATGACGCGCGGCGACGT 705
Db 661 TGGGACCGGATGAGTGTGCGCGCGGCGATGACGCGCGGCGACGT 705
```

RESULT 5

```
US-09-285-306-8
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-8
```

```
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGCATCAACCGAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGCATCAACCGAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60

Qy 61 CGATCAAGGAGTCTTTCGGCACCAAGCGCGCTGTCCGGCGCTGGGCGCCGGGTGGTCTGTCCCGGG 120
Db 61 CGATCAAGGAGTCTTTCGGCACCAAGCGCGCTGTCCGGCGCTGGGCGCCGGGTGGTCTGTCCCGGG 120

Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTCCGGCGCTGGGCGCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCGCTGTCCGGCGCTGGGCGCCGGGTGGTCTGTCCCGGG 180

Qy 181 AGCGGGCGGGCTCGAGGTCCGAGATCGGTGATCGGCTCGCTCGGTGATGCGGCGG 240
Db 181 AGCGGGCGGGCTCGAGGTCCGAGATCGGTGATCGGCTCGCTCGGTGATGCGGCGG 240

Qy 241 TCGAGACCCCGGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGATGCGGCGG 300
Db 241 TCGAGACCCCGGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGATGCGGCGG 300

Qy 301 TCAACCCGTTTCGGGTTCATCGAGACGCGGTACCGAAGGTGGTCCGACGGCGTGTCAACG 360
Db 301 TCAACCCGTTTCGGGTTCATCGAGACGCGGTACCGAAGGTGGTCCGACGGCGTGTCAACG 360

Qy 361 ACGAGATCCACTACTGACCGCGAGACGAGAGAGACCGGACAGTGGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCGCGAGACGAGAGAGACCGGACAGTGGTGGCGAGGCCAACT 420

Qy 421 CGCGGATCGACGACAAGGCGCGTTCCGGAGGCGCCGGTGGTCCGCGCGAAGGCGG 480
Db 421 CGCGGATCGACGACAAGGCGCGTTCCGGAGGCGCCGGTGGTCCGCGCGAAGGCGG 480

Qy 481 GCGAGGTGAGTACGTGCTCGTCCGAGGTGGACTACATGAGAGTGTGCGCGCGCCAGA 540
Db 481 GCGAGGTGAGTACGTGCTCGTCCGAGGTGGACTACATGAGAGTGTGCGCGCGCCAGA 540

Qy 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGACGACGACGACCGCGTCCG 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGACGACGACGACCGCGTCCG 600

Qy 601 TGATGGGCGCAACATGACGCGCAGCGGTTCGCTGGTGGCGAGGAGCGCGCGCTGG 660
Db 601 TGATGGGCGCAACATGACGCGCAGCGGTTCGCTGGTGGCGAGGAGCGCGCGCTGG 660

Qy 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
```

```
RESULT 6
US-09-285-306-9
; Sequence 9, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 9
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
```

```
US-09-285-306-9
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGCATCAACCGAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGCATCAACCGAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60

Qy 61 CGATCAAGGAGTCTTTCGGCACCAAGCGCGCTGTCCGGCGCTGGGCGCCGGGTGGTCTGTCCCGGG 120
Db 61 CGATCAAGGAGTCTTTCGGCACCAAGCGCGCTGTCCGGCGCTGGGCGCCGGGTGGTCTGTCCCGGG 120

Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTCCGGCGCTGGGCGCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCGCTGTCCGGCGCTGGGCGCCGGGTGGTCTGTCCCGGG 180

Qy 181 AGCGGGCGGGCTCGAGGTCCGAGATCGGTGATCGGCTCGCTCGGTGATGCGGCGG 240
Db 181 AGCGGGCGGGCTCGAGGTCCGAGATCGGTGATCGGCTCGCTCGGTGATGCGGCGG 240

Qy 241 TCGAGACCCCGGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGATGCGGCGG 300
Db 241 TCGAGACCCCGGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGATGCGGCGG 300

Qy 301 TCAACCCGTTTCGGGTTCATCGAGACGCGGTACCGAAGGTGGTCCGACGGCGTGTCAACG 360
Db 301 TCAACCCGTTTCGGGTTCATCGAGACGCGGTACCGAAGGTGGTCCGACGGCGTGTCAACG 360

Qy 361 ACGAGATCCACTACTGACCGCGAGACGAGAGAGACCGGACAGTGGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCGCGAGACGAGAGAGACCGGACAGTGGTGGCGAGGCCAACT 420

Qy 421 CGCGGATCGACGACAAGGCGCGTTCCGGAGGCGCCGGTGGTCCGCGCGAAGGCGG 480
Db 421 CGCGGATCGACGACAAGGCGCGTTCCGGAGGCGCCGGTGGTCCGCGCGAAGGCGG 480

Qy 481 GCGAGGTGAGTACGTGCTCGTCCGAGGTGGACTACATGAGAGTGTGCGCGCGCCAGA 540
Db 481 GCGAGGTGAGTACGTGCTCGTCCGAGGTGGACTACATGAGAGTGTGCGCGCGCCAGA 540

Qy 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGACGACGACGACCGCGTCCG 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCGAGACGACGACGACCGCGTCCG 600

Qy 601 TGATGGGCGCAACATGACGCGCAGCGGTTCGCTGGTGGCGAGGAGCGCGCGCTGG 660
Db 601 TGATGGGCGCAACATGACGCGCAGCGGTTCGCTGGTGGCGAGGAGCGCGCGCTGG 660

Qy 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
```

```
RESULT 7
US-09-285-306-12
; Sequence 12, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 705
```

```
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-12

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTTCAGTTCGTGGCGG 60
DB 1 CCCAGAGCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTTCAGTTCGTGGCGG 60
QY 61 CGATCAAGAGATTCTTCGCGACCCAGCAGCTGTCTCCAGTTCAATGACACAGAACACCCGC 120
DB 61 CGATCAAGAGATTCTTCGCGACCCAGCAGCTGTCTCCAGTTCAATGACACAGAACACCCGC 120
QY 121 TGTGGGGCTCACCCACAAGCGCCCTGTTCGGCGCTGGGCGGCTGTCTGCCCGG 180
DB 121 TGTGGGGCTCACCCACAAGCGCCCTGTTCGGCGCTGGGCGGCTGTCTGCCCGG 180
QY 181 AGCGGGCGGGCTGAGGTTCGGAGCTCGCGAGCTGTCACCGTCCCACTACGCGCGGATGTGCCGA 240
DB 181 AGCGGGCGGGCTGAGGTTCGGAGCTCGCGAGCTGTCACCGTCCCACTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTCGGTGTATGCCGGG 300
DB 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTCGGTGTATGCCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGTCAGCGCGTGTGCACCG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGTCAGCGCGTGTGCACCG 360
QY 361 ACGAGATCCACTACTGACCGCGCAGGAGGACCGCACGTCGTGTGCGCAGGCGCAACT 420
DB 361 ACGAGATCCACTACTGACCGCGCAGGAGGACCGCACGTCGTGTGCGCAGGCGCAACT 420
QY 421 CGCGATCGACGACAAAGGGCGGTTTCGGAGGCGCGGTCGTGTCGCGCGCAAGGGCG 480
DB 421 CGCGATCGACGACAAAGGGCGGTTTCGGAGGCGCGGTCGTGTCGCGCGCAAGGGCG 480
QY 481 GCGAGGTCGAGTACGTGCTCCGAGGTGGACTACATGACGTCGTGCGCGCGCCAGA 540
DB 481 GCGAGGTCGAGTACGTGCTCCGAGGTGGACTACATGACGTCGTGCGCGCGCCAGA 540
QY 541 TGGTGTCCGTGSCCAACCGCGATGATCCCGTTCTTCGAGCA CGAACCCGTGCC 600
DB 541 TGGTGTCCGTGSCCAACCGCGATGATCCCGTTCTTCGAGCA CGAACCCGTGCC 600
QY 601 TGATGGCGCCAAACATGACGCGCAGCGGTTCCGCTGTCGAGCAGAGCGCGCTGG 660
DB 601 TGATGGCGCCAAACATGACGCGCAGCGGTTCCGCTGTCGAGCAGAGCGCGCTGG 660
QY 661 TGGGCACCGGATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
DB 661 TGGGCACCGGATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
```

```
RESULT 8
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
```

```
; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-13

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTTCAGTTCGTGGCGG 60
DB 1 CCCAGAGCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTTCAGTTCGTGGCGG 60
QY 61 CGATCAAGAGATTCTTCGCGACCCAGCAGCTGTCTCCAGTTCAATGACACAGAACACCCGC 120
DB 61 CGATCAAGAGATTCTTCGCGACCCAGCAGCTGTCTCCAGTTCAATGACACAGAACACCCGC 120
QY 121 TGTGGGGCTCACCCACAAGCGCGCTGTTCGGCGCTGGGCGGCTGTCTGCCCGG 180
DB 121 TGTGGGGCTCACCCACAAGCGCGCTGTTCGGCGCTGGGCGGCTGTCTGCCCGG 180
QY 181 AGCGGGCGGGCTGAGGTTCGGAGCTCGCGAGCTGTCACCGTCCCACTACGCGCGGATGTGCCGA 240
DB 181 AGCGGGCGGGCTGAGGTTCGGAGCTCGCGAGCTGTCACCGTCCCACTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTCGGTGTATGCCGGG 300
DB 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTCGGTGTATGCCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGTCAGCGCGTGTGCACCG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGTCAGCGCGTGTGCACCG 360
QY 361 ACGAGATCCACTACTGACCGCGCAGGAGGACCGCACGTCGTGTGCGCAGGCGCAACT 420
DB 361 ACGAGATCCACTACTGACCGCGCAGGAGGACCGCACGTCGTGTGCGCAGGCGCAACT 420
QY 421 CGCGATCGACGACAAAGGGCGGTTTCGGAGGCGCGGTCGTGTCGCGCGCAAGGGCG 480
DB 421 CGCGATCGACGACAAAGGGCGGTTTCGGAGGCGCGGTCGTGTCGCGCGCAAGGGCG 480
QY 481 GCGAGGTCGAGTACGTGCTCCGAGGTGGACTACATGACGTCGTGCGCGCGCCAGA 540
DB 481 GCGAGGTCGAGTACGTGCTCCGAGGTGGACTACATGACGTCGTGCGCGCGCCAGA 540
QY 541 TGGTGTCCGTGSCCAACCGCGATGATCCCGTTCTTCGAGCA CGAACCCGTGCC 600
DB 541 TGGTGTCCGTGSCCAACCGCGATGATCCCGTTCTTCGAGCA CGAACCCGTGCC 600
QY 601 TGATGGCGCCAAACATGACGCGCAGCGGTTCCGCTGTCGAGCAGAGCGCGCTGG 660
DB 601 TGATGGCGCCAAACATGACGCGCAGCGGTTCCGCTGTCGAGCAGAGCGCGCTGG 660
QY 661 TGGGCACCGGATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
DB 661 TGGGCACCGGATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
```

```
RESULT 9
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
```

```

; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14

```

```

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCACAGTCGTGCGG 60
Db 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCACAGTCGTGCGG 60

Qy 61 CGATCAAGGAGTTCTTTCGGACACGAGCAGTGTCCAGTTTCATGGACAGAACCCGC 120
Db 61 CGATCAAGGAGTTCTTTCGGACACGAGCAGTGTCCAGTTTCATGGACAGAACCCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGGCTGGGCGCGGGTGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGGCTGGGCGCGGGTGTCTGTCCCGGG 180

Qy 181 AGCGGGCGGGCTGGAGGTCGCGACGTGCAACCCGTCCTCACTACGGCCGATGTGCCCGA 240
Db 181 AGCGGGCGGGCTGGAGGTCGCGACGTGCAACCCGTCCTCACTACGGCCGATGTGCCCGA 240

Qy 241 TCAGAGACCCGGAGGTCCTCAACATCGGTCGTATCGGTCGCTGTATGCGCGG 300
Db 241 TCAGAGACCCGGAGGTCCTCAACATCGGTCGTATCGGTCGCTGTATGCGCGG 300

Qy 301 TCAACCCGTTCCGGGTTTCATCGAGAGCGCTACCGCAAGGTGGTCCAGCGGTGTACCG 360
Db 301 TCAACCCGTTCCGGGTTTCATCGAGAGCGCTACCGCAAGGTGGTCCAGCGGTGTACCG 360

Qy 361 ACAGAGATCCACTACCTGACCGCGACGAGGAGGACCGCCAGCTGGTGGCGAGGCCAACT 420
Db 361 ACAGAGATCCACTACCTGACCGCGACGAGGAGGACCGCCAGCTGGTGGCGAGGCCAACT 420

Qy 421 CGCCGATCGACGACAAAGGCGGTTCCGGAGGCGCGGGTGTCTGGTCCGCGCGCAGA 540
Db 421 CGCCGATCGACGACAAAGGCGGTTCCGGAGGCGCGGGTGTCTGGTCCGCGCGCAGA 540

Qy 541 TGGTGTCCGTTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGACGACGACCGTCC 600
Db 541 TGGTGTCCGTTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGACGACGACCGTCC 600

Qy 601 TGATGGGCGCAACATGACGCGCGAGGCGGTTCCGCTGGTGGTGGAGGCGCGCGTGG 660
Db 601 TGATGGGCGCAACATGACGCGCGAGGCGGTTCCGCTGGTGGTGGAGGCGCGCGTGG 660

Qy 661 TGGGACCGGATCGAGCTGCGCGCGGATCGACGCGGCGACGT 705
Db 661 TGGGACCGGATCGAGCTGCGCGCGGATCGACGCGGCGACGT 705

```

```

RESULT 10
US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Geringas, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285, 306A
; CURRENT FILING DATE: 1999-04-02

```

```

; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-16

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCACAGTCGTGCGG 60
Db 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCACAGTCGTGCGG 60

Qy 61 CGATCAAGGAGTTCTTTCGGACACGAGCAGTGTCCAGTTTCATGGACAGAACCCGC 120
Db 61 CGATCAAGGAGTTCTTTCGGACACGAGCAGTGTCCAGTTTCATGGACAGAACCCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGGCTGGGCGCGGGTGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGGCTGGGCGCGGGTGTCTGTCCCGGG 180

Qy 181 AGCGGGCGGGCTGGAGGTCGCGACGTGCAACCCGTCCTCACTACGGCCGATGTGCCCGA 240
Db 181 AGCGGGCGGGCTGGAGGTCGCGACGTGCAACCCGTCCTCACTACGGCCGATGTGCCCGA 240

Qy 241 TCAGAGACCCGGAGGTCCTCAACATCGGTCGTATCGGTCGCTGTATGCGCGG 300
Db 241 TCAGAGACCCGGAGGTCCTCAACATCGGTCGTATCGGTCGCTGTATGCGCGG 300

Qy 301 TCAACCCGTTCCGGGTTTCATCGAGAGCGCTACCGCAAGGTGGTCCAGCGGTGTACCG 360
Db 301 TCAACCCGTTCCGGGTTTCATCGAGAGCGCTACCGCAAGGTGGTCCAGCGGTGTACCG 360

Qy 361 ACAGAGATCCACTACCTGACCGCGACGAGGAGGACCGCCAGCTGGTGGCGAGGCCAACT 420
Db 361 ACAGAGATCCACTACCTGACCGCGACGAGGAGGACCGCCAGCTGGTGGCGAGGCCAACT 420

Qy 421 CGCCGATCGACGACAAAGGCGGTTCCGGAGGCGCGGGTGTCTGGTCCGCGCGCAGA 540
Db 421 CGCCGATCGACGACAAAGGCGGTTCCGGAGGCGCGGGTGTCTGGTCCGCGCGCAGA 540

Qy 541 TGGTGTCCGTTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGACGACGACCGTCC 600
Db 541 TGGTGTCCGTTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGACGACGACCGTCC 600

Qy 601 TGATGGGCGCAACATGACGCGCGAGGCGGTTCCGCTGGTGGTGGAGGCGCGCGTGG 660
Db 601 TGATGGGCGCAACATGACGCGCGAGGCGGTTCCGCTGGTGGTGGAGGCGCGCGTGG 660

Qy 661 TGGGACCGGATCGAGCTGCGCGCGGATCGACGCGGCGACGT 705
Db 661 TGGGACCGGATCGAGCTGCGCGCGGATCGACGCGGCGACGT 705

```

```

RESULT 11
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Geringas, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US

```



```
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 1.8e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGATCACCGCAGACCCCTGATCAACATCGGTCCAGTGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGATCACCGCAGACCCCTGATCAACATCGGTCCAGTGTGGCGG 60
Qy 61 CGATCAAGGAGTTCTTGGCCACCGAGCGTGTCCAGTTTCATGACACGAGAACCCGC 120
Db 61 CGATCAAGGAGTTCTTGGCCACCGAGCGTGTCCAGTTTCATGACACGAGAACCCGC 120
Qy 121 TGTCCGGGCTCACCCACAGCCGCTGTCCGGGCTGGGCGCGGTGGTCTGTCCCGG 180
Db 121 TGTCCGGGCTCACCCACAGCCGCTGTCCGGGCTGGGCGCGGTGGTCTGTCCCGG 180
Qy 181 AGCGGGCCGGCTGGAGTTCGCGACGTGCGACCGTCCACTACGGCGGATGTGCCGA 240
Db 181 AGCGGGCCGGCTGGAGTTCGCGACGTGCGACCGTCCACTACGGCGGATGTGCCGA 240
Qy 241 TCAGAGACCCCGAGGTCCTCAACATCGTCTGATCGGCTCGCTGTGATCGCGGG 300
Db 241 TCAGAGACCCCGAGGTCCTCAACATCGTCTGATCGGCTCGCTGTGATCGCGGG 300
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGTGGTTCGACGGGTTGTCACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGTGGTTCGACGGGTTGTCACCG 360
Qy 361 ACAGATTCACCTACTGACCCCGACGAGGAGGACCGCAGCTGGTGGCGAGGCCAACT 420
Db 361 ACAGATTCACCTACTGACCCCGACGAGGAGGACCGCAGCTGGTGGCGAGGCCAACT 420
Qy 421 CGCCGATCGACGACAAGGGCCGGTTTCGCGAGGCGCCGGTCTGTCGCGCGAAGCGG 480
Db 421 CGCCGATCGACGACAAGGGCCGGTTTCGCGAGGCGCCGGTCTGTCGCGCGAAGCGG 480
Qy 481 GCGAGGTCGAGTACGTTGCCCTCGTCCGAGTGGACTACATGACNTKSCCGCGCCARA 540
Db 481 GCGAGGTCGAGTACGTTGCCCTCGTCCGAGTGGACTACATGACNTKSCCGCGCCARA 540
Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTTCCTCGAGCAGCAGCGCCACCGTGC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTTCCTCGAGCAGCAGCGCCACCGTGC 600
Qy 601 TGATGGGCGCAACATATGACGCGCAGCGGTTCGCTGGTGGTGGCGAGCGCGCTGG 660
Db 601 TGATGGGCGCAACATATGACGCGCAGCGGTTCGCTGGTGGTGGCGAGCGCGCTGG 660
Qy 661 TGGGACCGGCGATGGAGTGCAGCGCGCGATCGACGCGGCGAGCT 705
```

```
Db 661 TGGGACCGGCGATGGAGTGCAGCGCGCGATCGACGCGGCGAGCT 705

RESULT 14
US-09-285-306-11
; Sequence 11, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-11

Query Match      98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 4.3e-153;
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGATCACCGCAGACCCCTGATCAACATCGGTCCAGTGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGATCACCGCAGACCCCTGATCAACATCGGTCCAGTGTGGCGG 60
Qy 61 CGATCAAGGAGTTCTTCCGGCACCGAGCGTGTCCAGTTTCATGGACAGAACACCGC 120
Db 61 CGATCAAGGAGTTCTTCCGGCACCGAGCGTGTCCAGTTTCATGGACAGAACACCGC 120
Qy 121 TGTCCGGGCTCACCCACAGCGCGCTGTCCGGGCTGGGCGCGGTGGTCTGTCCCGG 180
Db 121 TGTCCGGGCTCACCCACAGCGCGCTGTCCGGGCTGGGCGCGGTGGTCTGTCCCGG 180
Qy 181 AGCGGGCCGGCTGGAGTTCGCGACGTGCGACCGTCCACTACGGCGGATGTGCCGA 240
Db 181 AGCGGGCCGGCTGGAGTTCGCGACGTGCGACCGTCCACTACGGCGGATGTGCCGA 240
Qy 241 TCAGAGACCCCGAGGTTCCAAACATCGGTTTCATCGGCTCGCTGTGATCGCGGG 300
Db 241 TCAGAGACCCCGAGGTTCCAAACATCGGTTTCATCGGCTCGCTGTGATCGCGGG 300
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGTGGTTCGACGGGTTGTCACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGTGGTTCGACGGGTTGTCACCG 360
Qy 361 ACAGATTCACCTACTGACCCCGACGAGGAGGACCGCAGCTGGTGGCGAGGCCAACT 420
Db 361 ACAGATTCACCTACTGACCCCGACGAGGAGGACCGCAGCTGGTGGCGAGGCCAACT 420
Qy 421 CGCCGATCGACGACAAGGGCCGGTTTCGCGAGGCGCCGGTGGTGGTCCGCGAAGCGG 480
Db 421 CGCCGATCGACGACAAGGGCCGGTTTCGCGAGGCGCCGGTGGTGGTCCGCGAAGCGG 480
Qy 481 GCGAGGTCGAGTACGTTGCCCTCGTCCGAGTGGACTACATGACNTKSCCGCGCCARA 540
Db 481 GCGAGGTCGAGTACGTTGCCCTCGTCCGAGTGGACTACATGACNTKSCCGCGCCARA 540
Qy 481 GCGAGGTCGAGTACGTTGCCCTCGTCCGAGTGGACTACATGACNTKSCCGCGCCARA 540
Db 481 GCGAGGTCGAGTACGTTGCCCTCGTCCGAGTGGACTACATGACNTKSCCGCGCCARA 540
```


QY 541 TGGTGTCCGTGCGCCACCGCGATGATCCGTTCCCTCGACACGACGACCGCCACCGTGC 600
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
541 TGGTGTCCGTGCGCCACCGCGATGATCCGTTCCCTCGACACGACGACCGCCACCGTGC 600
QY 601 TGATGGGCGCCAAACATGACGCGCCACGAGCGGTTCCGCTGCTGCGCAGCAGGCGCCGCTGG 660
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
601 TGATGGGCGCCAAACATGACGCGCCACGAGCGGTTCCGCTGCTGCGCAGCAGGCGCCGCTGG 660
QY 661 TGGGACCGGCGATGAGCTGCGCGCGCGATGACGCGCGGACGT 705
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
661 TGGGACCGGCGATGAGCTGCGCGCGCGATGACGCGCGGACGT 705

RESULT 15

US-09-285-306-10

; Sequence 10, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 10

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 1.6e-152;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCCGTCGTGGCGG 60
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
1 CCCAGGACGTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCGTGGCGG 60

QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTATGACACAGAACACCCGC 120
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTATGACACAGAACACCCGC 120

QY 121 TGTGGGGCTCACCCACAGCGCGCTGTGGGGCTGGGGCTGGGGCTGGTCTGTCCCGGG 180
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
121 TGTGGGGCTCACCCACAGCGCGCTGTGGGGCTGGGGCTGGGGCTGGTCTGTCCCGGG 180

QY 181 AGCGGGCGGGCTGGAGGTCGCGACGTGCACCCCGCTCCACTACCGCCGGATGTGCCCGA 240
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
181 AGCGGGCGGGCTGGAGGTCGCGACGTGCACCCCGCTCCACTACCGCCGGATGTGCCCGA 240

QY 241 TCGAGACCCCGAGAGGTCACCAATCGGTCTGATCGGTTCGCTGCTATGCGCGG 300
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
241 TCGAGACCCCGAGAGGTCACCAATCGGTCTGATCGGTTCGCTGCTATGCGCGG 300

QY 301 TCNACCCGTTCCGGTTTCATCGAGCGCGTACCGCAAGGTGTCGACGGCTGTCCACG 360
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
301 TCNACCCGTTCCGGTTTCATCGAGCGCGTACCGCAAGGTGTCGACGGCTGTCCACG 360

QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCACGTSGTGCGCAGGCCAACT 420
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCACGTSGTGCGCAGGCCAACT 420

QY 421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCCCGGGTGTGCTCCGCCCAAGCGG 480
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCCCGGGTGTGCTCCGCCCAAGCGG 480

QY 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGACGTCGCGCGGCCAGA 540

Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGACGTCGCGCGGCCAGA 540
QY 541 TGGTGTCCGTGCGCCACCGCGATGATCCGTTCCCTCGAGCAGACGACCGCCACCGTGC 600
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
541 TGGTGTCCGTGCGCCACCGCGATGATCCGTTCCCTCGAGCAGACGACCGCCACCGTGC 600
QY 601 TGATGGGCGCCAAACATGACGCGCCACGAGCGGTTCCGCTGCTGCGCAGCAGGCGCGCTGG 660
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
601 TGATGGGCGCCAAACATGACGCGCCACGAGCGGTTCCGCTGCTGCGCAGCAGGCGCGCTGG 660
QY 661 TGGGACCGGCGATGAGCTGCGCGCGCGATGACGCGCGGACGT 705
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
661 TGGGACCGGCGATGAGCTGCGCGCGCGATGACGCGCGGACGT 705

Search completed: August 25, 2005, 11:35:33

Job time : 452.661 secs

This Page Blank (uspio)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds
(without alignment)
11150.034 Million cell updates/sec

Title: US-09-285-306-6
Perfect score: 705
Sequence: 1 cccaggagctggagcgatc.....ggcgatgcgagcgagcgt 705

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents NA:
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:
5: /cgn2_6/ptodata/1/ina/PTUS_COMB.seq:
6: /cgn2_6/ptodata/1/ina/backfiles1.seq:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	85.6	706	US-08-797-812-24	Sequence 24, Appli
2	603	85.5	4403765	US-09-103-840A-2	Sequence 2, Appli
3	603	85.5	4411529	US-09-103-840A-1	Sequence 1, Appli
4	558.2	79.2	3447	US-08-313-185-57	Sequence 57, Appl
5	558.2	79.2	3447	US-08-313-185-57	Sequence 57, Appl
6	540.4	76.7	970	US-08-250-030-1	Sequence 1, Appli
7	540.4	76.7	970	PCT-US95-06790-1	Sequence 1, Appli
8	530.4	75.2	620	US-08-757-653-135	Sequence 135, App
9	530.4	75.2	620	US-08-757-653-138	Sequence 138, App
10	530.4	75.2	620	US-08-520-946-135	Sequence 135, App
11	530.4	75.2	620	US-08-520-946-138	Sequence 138, App
12	530.4	75.2	620	US-09-655-378A-135	Sequence 135, App
13	530.4	75.2	620	US-09-655-378A-138	Sequence 138, App
14	528.8	75.0	620	US-08-757-653-136	Sequence 136, App
15	528.8	75.0	620	US-08-757-653-137	Sequence 137, App
16	528.8	75.0	620	US-08-757-653-139	Sequence 139, App
17	528.8	75.0	620	US-08-757-653-140	Sequence 140, App
18	528.8	75.0	620	US-08-520-946-136	Sequence 136, App
19	528.8	75.0	620	US-08-520-946-137	Sequence 137, App
20	528.8	75.0	620	US-08-520-946-139	Sequence 139, App
21	528.8	75.0	620	US-08-520-946-140	Sequence 140, App
22	528.8	75.0	620	US-09-655-378A-136	Sequence 136, App
23	528.8	75.0	620	US-09-655-378A-137	Sequence 137, App
24	528.8	75.0	620	US-09-655-378A-139	Sequence 139, App
25	528.8	75.0	620	US-09-655-378A-140	Sequence 140, App
26	453.4	64.3	706	US-08-797-812-25	Sequence 25, Appli
27	411	58.3	5099	US-09-887-052-1	Sequence 1, Appli

28	409.4	58.1	5099	4	US-09-887-052-3	Sequence 3, Appli
29	409.4	58.1	5099	4	US-09-887-052-5	Sequence 5, Appli
30	402	57.0	4227	4	US-09-902-540-8919	Sequence 8919, Ap
C 31	402	57.0	9367	4	US-09-902-540-951	Sequence 951, App
C 32	371.2	52.7	4074	4	US-09-252-991A-4737	Sequence 4737, Ap
C 33	371.2	52.7	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
C 34	337.2	47.8	4083	4	US-09-489-039A-22	Sequence 22, Appl
C 35	337.2	47.8	4206	4	US-09-489-039A-30	Sequence 30, Appl
C 36	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
C 37	293.4	41.6	432	3	US-09-082-614A-59	Sequence 59, Appl
C 38	286.2	40.6	324	3	US-08-750-088A-36	Sequence 36, Appl
C 39	286.2	40.6	324	4	US-09-722-319-36	Sequence 36, Appl
C 40	265.2	37.6	2964	4	US-09-540-236-1097	Sequence 1097, Ap
C 41	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
C 42	265.2	37.6	31063	4	US-09-596-002-20	Sequence 20, Appl
C 43	255.6	36.3	319	3	US-08-750-088A-35	Sequence 35, Appl
C 44	255.6	36.3	319	4	US-09-722-319-35	Sequence 35, Appl
C 45	249.8	35.4	11935	4	US-09-634-238-401	Sequence 401, App

ALIGNMENTS

RESULT 1
US-08-797-812-24
; Sequence 24, Application US/08797812
; Patent No. 6228575
; GENERAL INFORMATION:
; APPLICANT: Gingersas, Thomas A.
; APPLICANT: Mack, David
; APPLICANT: Chee, Mark S.
; APPLICANT: Berno, Anthony J.
; APPLICANT: Stryer, Lubert
; APPLICANT: Ghandour, Ghassan
; APPLICANT: Wang, Ching
; TITLE OF INVENTION: Chip-Based Species Identification and
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/797,812
; FILING DATE: 07-FEB-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/017,765
; FILING DATE: 15-MAY-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/629,031
; FILING DATE: 08-APR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/012,631
; FILING DATE: 01-MAR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/011,339
; FILING DATE: 08-FEB-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Fitts, Renee A.
; REGISTRATION NUMBER: 35,136
; REFERENCE/DOCKET NUMBER: 16528X-018550
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-326-2400
; TELEFAX: 415-326-2422

; INFORMATION FOR SEQ ID NO: 24:

; SEQUENCE CHARACTERISTICS:
; LENGTH: 706 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-797-812-24

Query Match 86.6%; Score 610.6; DB 3; Length 706;

Best Local Similarity 91.6%; Pred. No. 1.1e-118; Indels 0; Gaps 0;
Matches 646; Conservative 0; Mismatches 59;

```
Qy 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60
Db 2 CCCAGGAGCTGGAGGCGATCACACCGCAGACGTTGATCAACATCCGCGCGTGTGCGCG 61
Qy 61 CGATCAAGAGTCTTTCGGCCACGACCGCAGCTGTCCAGTTCATGACACAGAACACCGC 120
Db 62 CGATCAAGAGTCTTTCGGCCACGACCGCAGCTGTGAGCCAAATTCATGACCAAGAACCGC 121
Qy 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGGCTGGGCGCGGTGCTGTCTGTCCCGG 180
Db 122 TGTGGGGTTGACCCACAAGCGCGACTGTGCGGCTGGGCGCGGTCTGTCACTGT 181
Qy 181 AGCGGGCGGGTGTGAGTTCGCGCAGCTGCACCCGCTCCCACTACGGCCGGATGTGCCGA 240
Db 182 AGCGTCCGGCTGGAGTTCGCGCAGCTGCACCCGCTCCCACTACGGCCGGATGTGCCGA 241
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGTGTGATCGGCTGCGCTGTGCGGTGTATGCGGG 300
Db 242 TCGAACCCCTGAGGGGCCAACATCGGTCTGATCGGCTGCTGTGCGGTGTATGCGGG 301
Qy 301 TCAACCCGTTGCGGTTTCATCGAGCGCGTACCGCAAGTGTGTGCGGCGTGTGCGG 360
Db 302 TCAACCCGTTGCGGTTTCATCGAAACGCGGTACCGCAAGTGTGTGCGGCGTGTGCGG 361
Qy 361 ACGAGATCCACTACCTGACCCCGCAGCAGGAGGACCGCACGTGTGTGCGCGAGGCCAACT 420
Db 362 ACGAGATCGTGTACCTGACCCCGCAGCAGGAGGACCGCACGTGTGTGCGCACAGGCCAACT 421
Qy 421 CGCGATCGACGACAGGGCGGTTCGCGGAGGCGCGGTGCTGTGCGCGCGAGGCGG 480
Db 422 CGCGATCGATGCGGACGCTGCTGTGCGAGCGCGGTGCTGTGCGCGCGAGGCGG 481
Qy 481 GCGAGTGTAGTGTGCTGCTGCGAGGTGGAATACATGACGAGTGTGCGCGCGCAGA 540
Db 482 GCGAGTGTAGTGTGCTGCTGCTGAGGTGGAATACATGAGAGTGTGCGCGCGCAGA 541
Qy 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTTCTCGAGCAGCAGCCCAACCGTGC 600
Db 542 TGGTGTGCGTGGCCACCGCGATGATTCCTTCTCGAGCAGCAGCCCAACCGTGC 601
Qy 601 TGATGGGCGCAACATGACGCGCAGGCGGTTCGCTGTGCGAGGAGGCGCGGTG 660
Db 602 TCATGGGCGCAACATGACGCGCAGGCGGTTCGCTGTGCGAGGAGGCGCGGTG 661
Qy 661 TGGCACCGGATGGAGTGTGCGGCGGATCGACGGCGACGT 705
Db 662 TGGCACCGGATGGAGTGTGCGGCGGATCGACGGCGACGT 706
```

RESULT 2

US-09-103-840A-2
; Sequence 2, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TUBERCULOSIS

; FILE REFERENCE: 24366-20007.00

; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 4403765
; TYPE: DNA

; ORGANISM: Mycobacterium tuberculosis

; FEATURE:
; OTHER INFORMATION: CDC 1551

; OTHER INFORMATION: "n" bases at various positions throughout the sequence
; OTHER INFORMATION: represent a, t, c or g
US-09-103-840A-2

Query Match 85.5%; Score 603; DB 3; Length 4403765;

Best Local Similarity 91.4%; Pred. No. 1.2e-116; Indels 0; Gaps 0;
Matches 639; Conservative 0; Mismatches 60;

```
Qy 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60
Db 762963 CCCAGGAGCTGGAGGCGATCACACCGCAGACGTTGATCAACATCCGCGCGTGTGCGCG 763022
Qy 61 CGATCAAGAGTCTTTCGGCAACGAGCCAGCTGTCCAGTTCATGACCAAGAACCCGC 120
Db 763023 CGATCAAGAGTCTTTCGGCAACGAGCCAGCTGTGAGCCAAATTCATGACCAAGAACCCGC 763082
Qy 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGGCTGGGCGCGGTGCTGTCTGTCCCGG 180
Db 763083 TGTGGGGTTGACCCACAAGCGCGACTGTGCGGCTGGGCGCGGTCTGTCTGTG 763142
Qy 181 AGCGGGCGGGCTGGAGTTCGCGAGCGTGACCCCGTCCCACTACGGCCGGATGTGCCGA 240
Db 763143 AGCGTCCGGCTGGAGTTCGCGAGCGTGACCCCGTCCCACTACGGCCGGATGTGCCGA 763202
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGTGTGATCGGCTGCTGTGCGGTGTATGCGGG 300
Db 763203 TCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTGCTGTGCGGTGTATGCGGG 763262
Qy 301 TCAACCCGTTGCGGTTTCATCGAGACGCGGTACCGCAAGTGTGTGCGCGGTGTGTCACCG 360
Db 763263 TCAACCCGTTGCGGTTTCATCGAAACGCGGTACCGCAAGTGTGTGCGCGGTGTGTCACCG 763322
Qy 361 ACGAGATCCACTACCTGACCCCGCAGCAGGAGGACCGCCACGTGTGTGCGCGAGGCCAACT 420
Db 763323 ACGAGATCGTGTACCTGACCCCGCAGCAGGAGGACCGCCACGTGTGTGCGCACAGGCCAACT 763382
Qy 421 CGCGATCGACGACAGGGCGCGTTCGCGGAGGCGCGGTGCTGTGCGCGCGCAGGCGG 480
Db 763383 CGCGATCGATGCGGAGCGTTCGCTTCGAGCGCGCGGTGCTGTGCGCGCGCAGGCGG 763442
Qy 481 GCGAGTGTGAGTGTGCGGCGCTGCTGCGAGGTGGAATACATGAGAGTGTGCGCGCGCAGA 540
Db 763443 GCGAGTGTGAGTGTGCGGCGCTGCTGCTGAGGTGGAATACATGAGAGTGTGCGCGCGCAGA 763502
Qy 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTTCTCGAGCAGCAGCCCAACCGTGC 600
Db 763503 TGTGTGCGTGGCCACCGCGATGATTCCTTCTCGAGCAGCAGCCCAACCGTGC 763562
Qy 601 TGATGGGCGCAACATGACGCGCAGGCGGTTCGCTGTGCGAGGAGGCGCGGTG 660
Db 763563 TCATGGGCGCAACATGACGCGCAGGCGGTTCGCTGTGCGAGGAGGCGCGGTG 763622
Qy 661 TGGCACCGGATGGAGTGTGCGGCGGCGCGATCGACGCGG 699
Db 763623 TGGCACCGGATGGAGTGTGCGGCGGCGCGATCGACGCGG 763661
```

RESULT 3

US-09-103-840A-1
; Sequence 1, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:

```
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 1
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37RV
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.4%; Pred. No. 1.2e-116; Mismatches 0; Indels 0; Gaps 0;
Matches 639; Conservative 0;

QY 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCGCTCCAGTCTGTGGCGG 60
Db 761003 CCCAGAGCTGGAGGCGATCACACCGCAGACCGTGTATCAACATCGCGCGGTGTGGCGG 761062

QY 61 CGATCAAGAGGTTCTTGGCACCAGCAGCTGTCCAGTTTCATGACACAGAACACCCGC 120
Db 761063 CGATCAAGAGGTTCTTGGCACCAGCAGCTGTCCAGTTTCATGACACAGAACACCCGC 761122

QY 121 TGTGGGGGTCAACACAGCGCCCTGTGCGCGCTGGCGCGGTGTGTCTGCCGG 180
Db 761123 TGTGGGGGTTHACCAACAGCGCCCTGTGCGCGCTGGCGCGGTGTGTCTGCCGG 761182

QY 181 AGCGGCGCGGTGTGAGTTCGCGACGTGACCCCTGCCACTACCGCGCGGTGTGCCCGA 240
Db 761183 AGCGGCGCGGTGTGAGTTCGCGACGTGACCCCTGCCACTACCGCGCGGTGTGCCCGA 761242

QY 241 TCGAGACCCCGAGGGTTCACATCGTCTGATCGGTGTGTGATCGGTGTGTGCGGG 300
Db 761243 TCGAACCCTCGAGGGTTCACATCGTCTGATCGGTGTGTGATCGGTGTGTGCGGG 761302

QY 301 TCAACCCGTTCGGTTTCATCGAGAGCGCGTACCGCAAGGTGTGACGCGGTGTGACCG 360
Db 761303 TCAACCCGTTCGGTTTCATCGAGAGCGCGTACCGCAAGGTGTGACGCGGTGTGACCG 761362

QY 361 ACAGATCCACTACCTGACCGCGCAGAGGAGCGCCACGTGTGTGCGAGGCGCAACT 420
Db 761363 ACAGATCGTGTACTGTACCGCGCAGAGGAGCGCCACGTGTGTGCGAGGCGCAATT 761422

QY 421 CGCCGATCGACGACAGGCGCGGTTCGCGAGGCGCGGTGTGTGCGCGCGCAAGGCGG 480
Db 761423 CGCCGATCGATCGGACGCGTCTTCTGTCGAGCGCGGTGTGTGCGCGCGCAAGGCGG 761482

QY 481 GCGAGGTGAGTACCTGCTCGAGGTGGAATCATGACGCTGTGCGCGCGCGCA 540
Db 761483 GCGAGGTGAGTACCTGCTCGAGGTGGAATCATGACGCTGTGCGCGCGCGCA 761542

QY 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGCAGCAGCAGCAGCAGCAGTGTGCC 600
Db 761543 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGCAGCAGCAGCAGCAGTGTGCC 761602

QY 601 TGATGGCGCCAAATGACAGCGCGCGGTTCGCGTGTGCGAGCGCGCGCTGG 660
Db 761603 TCATGGGGGCAAAATGACAGCGCGCGGTTCGCGTGTGCGAGCGCGCGCTGG 761662

QY 661 TGGGCACCGGATGAGCTGCGCGCGGATGACGCGG 699
Db 761663 TGGGCACCGGATGAGCTGCGCGCGGATGACGCGG 761701
```

RESULT 4

US-08-313-185-57

```
; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-313-185-57
```

```
Query Match      79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.1e-107;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCGTCCAGTCTGTGGCGG 60
Db 1124 CCCAGAGCTGGAGGCGATCACACCGCAGACCGTGTCAATATCGTCCGTGGTGGTGGCGG 1183

QY 61 CGATCAAGAGTCTTTCGGCACCGACCGAGCTGTCCAGTTCATGGACAGAACACCCGC 120
Db 1184 CTATCAAGGAATCTTTCGGCACCGACCGAGCTGTCCAGTTCATGGATCAGAACACCCCTC 1243

QY 121 TGTGGGCTCACCACCAAGGCGCGCTGTGCGGCGCTGGGCGCGGTGTGTGTCTGTCTCCCGG 180
Db 1244 TGTGGGCTCACCACCAAGGCGCGCTGTGCGGCGCTGGGCGCGGTGTGTGTCTGTCTCCCGG 1303

QY 181 AGCGGCGCGGCTCGAGGTTCGCGACCGGTGCAACCGCTGCCACTAGCGCGGATGTGCCCGA 240
Db 1304 AGCGTGGCGGCTAGAGGTTCGCGACCGGTGCAACCGCTGCCACTAGCGCGGATGTGCCCGA 1363

QY 241 TCGAGACCCCGAGGTTCCCAACATCGCTGTGATCGGCTCGCTGTGCGGTGTATGCGCGG 300
Db 1364 TCGAGACTCCGAGGAGGGGCCCAACATAGGTGTGATCGGTTTCAATTGTGCGGTGTACGCGCGG 1423

QY 301 TCAACCCGTTTCGGGTTTCATCGAGACCGGTACCGCAAGGTGGTTCGACGGCGTGTACCG 360
Db 1424 TCAACCCGTTTCGGGTTTCATCGAACAACCGTACCGCAAGGTGGTTCGACGGTGTGTACCG 1483
```

```
Qy 361 ACAGATCCACTACTGACCGCCGACGAGGAGCCGCCACGTGGTGGCGAGGCCAACT 420
Db 1484 ACGAGATCGAATACTTGACCGCTGACGAGGAGACCGCCATGTCTGTGGCGAGGCCAACT 1543
Qy 421 CGCGATCGACGACAAAGGGCGGTTCGCGGAGGCCCGGGTCTGTCTCCGCGCAAGGCGG 480
Db 1544 CGCGATCGACGAGCGCGCGTTCCTCGAGCGCGCGTGTGGTGGCGCGCAAGGCGG 1603
Qy 481 CGGAGTCACTAGTCCCTCGCGAGTGGACTACATGAGCTGTTCGCGCGCCGAGA 540
Db 1604 CGGAGTCACTAGTCCCTCGCGAGTGGACTACATGAGCTGTTCGCGCGCCGAGA 1663
Qy 541 TGGTGTCCGTTGGCGCACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCCAAACCGTGC 600
Db 1664 TGGTGTCCGTTGGCGCACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCCAAACCGTGC 1723
Qy 601 TGATGGGCGCCAAATGACGAGCGCCGCGTTCGCGTGGTGGCGAGGCGCGGTGG 660
Db 1724 TGATGGGCGCTAAATGACGAGCGCCGCGTTCGCGTGGTGGCGAGGCGCGGTGG 1783
Qy 661 TGGGACCGGATGAGCTGCGCGCGCGATCGAGCGG 699
Db 1784 TGGGACCGGATGAGCTGCGCGCGCGATCGAGCGTG 1822
```

RESULT 5

```
US-09-082-614A-57
; Sequence 57, Application US/09082614A
; Patent No. 6124098
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESS: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/082,614A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/313,185
; FILING DATE: 12-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
```

```
TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-09-082-614A-57
Query Match 79.2%; Score 558.2; DB 3; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.1e-107;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;
Qy 1 CCAGAGCGTGGAGGCGATCACACCGCAGACCCGTGATCAACATCCGTCAGTGGTGGCGG 60
Db 1124 CCAGAGCGTGGAGGCGATCACCGCAGACCGTGTATCAATATCCGTCGCGGTGTCCCG 1183
Qy 61 CGATCAAGAGTCTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGGACAGCAACAACCCG 120
Db 1184 CTATCAAGAGTCTTCTTCGGCACCAGCCAGCTGTCCAGTTTCATGGATCAGAACACCTC 1243
Qy 121 TGTGGGGCTACCCACAAGCGCGCTGTTCGGGCTTGGGCCCGGGTGTGTCTCCCGGG 180
Db 1244 TGTGGGGCTTACCCACAAGCGCGCTGTTCGGGCTTGGGCCCGGGTGTGTCTCCCGGTG 1303
Qy 181 AGCGGGCGGGCTGGAGGTCGCGAGTCCGCGACGTGCACCCGTCGCCACTACGGCCGATGTGCCGA 240
Db 1304 AGCGTCCGGGCTAGAGTCCGCGAGTGCACCCCTTCGCACTACGCCGATGTGCCGA 1363
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTTCGGTGTATCGCGGG 300
Db 1364 TCGAGACTCCGAGGGGCCGAAACATAGTCTGTATCGGTTCAATGTCTGTACGCGGG 1423
Qy 301 TCAACCGGTTCCGGTTTCATCGAGACCGCGTACCGCAAGTGTGTTCGACGGGTGTACCG 360
Db 1424 TCAACCGCTTCCGGTTTCATCGAAACACCCGTACCGCAAGTGTGTTCGCTCAGCG 1483
Qy 361 ACAGATCCACTACTCGACCGCGACGAGGAGGACCGCCACGTGGTGGCGCAGGCCAACT 420
Db 1484 ACAGATCGAATACTTGACCGCTGACGAGGAGAACGCCCATGTCTGTGGCGCAGGCCAACT 1543
Qy 421 CGCGATCGACGACAAAGGGCGGTTCGCGAGGCGCGGGTGTGTCTCCGCGCAAGCGG 480
Db 1544 CGCGATCGACGAGGCGCGCGTTCCTCGAGCGCGCGTGTGGTGGCGCGCAAGCGG 1603
Qy 481 CGGAGTCACTAGTGGTCCCTCGTCCGAGTGGACTACATGAGCTGTTCGCGCGCCAGA 540
Db 1604 CGGAGTGGAGTACGTGGCTTCGCGAGTGGATTACATGGATGTCTCGCCACGCGCAGA 1663
Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCCAAACCGTGC 600
Db 1664 TGGTGTCCGTGGCCACGAGCATGATTCGTTCTTGGACACGAGCAGCCAAACCGTGC 1723
Qy 601 TGATGGGCGCCAAATGACGAGCGCGCGTTCGCTGTGTTCGCGAGGCGCGGTGG 660
Db 1724 TGATGGGCGCTAAATGACGAGCGCGCGTTCGTTGGTGGCGAGCAAGCGCGTGG 1783
Qy 661 TGGGACCGGATGAGCTGCGCGCGCGGATCGAGCGG 699
Db 1784 TGGGACCGGATGAGCTGCGCGCGCGGATCGAGCGTG 1822
```

RESULT 6

```
US-08-250-030-1
; Sequence 1, Application US/08250030
; Patent No. 5643723
; GENERAL INFORMATION:
; APPLICANT: Persing, David H.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in
; TITLE OF INVENTION: Clinical Specimens
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
```

;; ZIP: 55402
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: PatentIn Release #1.0, Version #1.25
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/250,030
;; FILING DATE: 26-MAY-1994
;; CLASSIFICATION: 435
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Muetting, Ann M.
;; REGISTRATION NUMBER: 33,977
;; REFERENCE/DOCKET NUMBER: 150.105US1
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 612-339-3061
;; TELEFAX: 612-339-3061
;; INFORMATION FOR SEQ ID NO: 1:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 970 base pairs
;; TYPE: nucleic acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: DNA
US-08-250-030-1

Query Match 76.7%; Score 540.4; DB 1; Length 970;
Best Local Similarity 91.1%; Pred. No. 5e-104;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy	1	CCCAGGAGCTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG	60
Db	341	CCCAGGAGCTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG	400
Qy	61	CGATCAAGGAGTTCTTCGGCACCACCGCAGCTGTCCAGTTTCATGACCAAGCAACCCGC	120
Db	401	CGATCAAGGAGTTCTTCGGCACCACCGCAGCTGTGAGCCAAATTCATGACCAAGCAACCCGC	460
Qy	121	TGTCGGGCTCACCCACAAGCGCCCTGTTCGGGCTGGGCGCGGGTGTGTGTCGGG	180
Db	461	TGTCGGGCTTACCCACAAGCGCCGACTGTTCGGGCTGGGCGCGGGTGTGTGTCGGG	520
Qy	181	AGCGGGCGGGCTGGAGTTCGGCAGCTGCACCCCTCCACTACGGCCGGATGCCCCGA	240
Db	521	AGCGTCCGGGCTGGAGAGCGGATCACCCGTCACCCCTCGACTACGGCCGGATGCCCCGA	580
Qy	241	TCGAGACCCCGGAGGGTCCCAACATTCGGTCTGTATCGGCTCGCTGTTCGGTGTATGCGGG	300
Db	581	TCGAAAACCCCTGAGGGGCCCAACATTCGGTCTGTATCGGCTCGCTGTTCGGTGTATGCGGG	640
Qy	301	TCAAACCGCTTCGGGTTTCATCGAGACCGCGTACCGAAGGTGGTTCGACCGGTGTACCG	360
Db	641	TCAAACCGCTTCGGGTTTCATCGAAAACCGCGTACCGAAGGTGGTTCGACCGGTGTACCG	700
Qy	361	ACGAGATCCACTACCTACCGCCGACGAGGAGGACCGCCACTGTCGTGGCGAGGCCAACT	420
Db	941	TCATGGGGGCAACATGACAGCCAGGCGG 630	970

RESULT 7
PCT-US95-06790-1
; Sequence 1, Application PC/TUS9506790
; GENERAL INFORMATION:
; APPLICANT: Mayo Foundation for Medical Education and Research
; APPLICANT: and Hoffmann-La Roche Inc.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/06790
; FILING DATE: 26-MAY-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Raasch, Kevin W.
; REGISTRATION NUMBER: 35,651
; REFERENCE/DOCKET NUMBER: 150.105WO1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
PCT-US95-06790-1

Query Match 76.7%; Score 540.4; DB 5; Length 970;
Best Local Similarity 91.1%; Pred. No. 5e-104;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy	1	CCCAGGAGCTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG	60
Db	341	CCCAGGAGCTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG	400
Qy	61	CGATCAAGGAGTTCTTCGGCACCACCGCAGCTGTCCAGTTTCATGACCAAGCAACCCGC	120
Db	401	CGATCAAGGAGTTCTTCGGCACCACCGCAGCTGTGAGCCAAATTCATGACCAAGCAACCCGC	460
Qy	121	TGTCGGGCTCACCCACAAGCGCCCTGTTCGGGCTGGGCGCGGGTGTGTGTCGGG	180
Db	461	TGTCGGGCTTACCCACAAGCGCCGACTGTTCGGGCTGGGCGCGGGTGTGTGTCGGG	520
Qy	181	AGCGGGCGGGCTGGAGTTCGGCAGCTGCACCCCTCCACTACGGCCGGATGCCCCGA	240
Db	521	AGCGTCCGGGCTGGAGAGCGGATCACCCGTCACCCCTCGACTACGGCCGGATGCCCCGA	580
Qy	241	TCGAGACCCCGGAGGGTCCCAACATTCGGTCTGTATCGGCTCGCTGTTCGGTGTATGCGGG	300
Db	581	TCGAAAACCCCTGAGGGGCCCAACATTCGGTCTGTATCGGCTCGCTGTTCGGTGTATGCGGG	640
Qy	301	TCAAACCGCTTCGGGTTTCATCGAGACCGCGTACCGAAGGTGGTTCGACCGGTGTACCG	360
Db	641	TCAAACCGCTTCGGGTTTCATCGAAAACCGCGTACCGAAGGTGGTTCGACCGGTGTACCG	700
Qy	361	ACGAGATCCACTACCTACCGCCGACGAGGAGGACCGCCACTGTCGTGGCGAGGCCAACT	420

```
Db 701 ACGAGATCGTGTACTGACCCGCGGACGAGGAGGACCCGCCACGTCGTGTGGCACAGGCCCAATT 760
Qy 421 CGCCGATCGACGACAAGGGCCGGTTCGCGGAGGCCCGGGTGTGTCTCGCGCGCAAGGGCG 480
Db 761 CGCCGATCGATGCGGACGGTGTCTGTCGAGCCGCGGTGTGTCTCGCGCGCAAGGGCG 820
Qy 481 GCGAGGTGAGTGTGTCCTGTCGTCGAGGTGGACTACATGAGACGTGTGCGCGGCCAGA 540
Db 821 GCGAGGTGAGTGTGTCCTGTCGTCGAGGTGGACTACATGAGACGTGTGCGCGGCCAGA 880
Qy 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCTCGACGACGACGCCAACCGTGGCC 600
Db 881 TGGTGTGCGTGGCCACCGCGATGATTCCTCTCTGAGACGACGACGCCAACCGTGGCC 940
Qy 601 TGATGGGGCCCAACATGACGCGCAGGGCGG 630
Db 941 TCATGGGGCCCAACATGACGCGCAGGGCGG 970

RESULT 8
US-08-757-653-135
; Sequence 135, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-135

Query Match 75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCAGTCGTGCGCGCGATCAAGAGTTCTTCGACACGACGACTGTCC 95
Db 1 ATCAACATCCGCGCGGTGTGTCGCGCGATCAAGAGTTCTTCGCGCACAGCGACTGAGC 60
Qy 96 CAGTTCATGGACCGACCAACCCGCTGTCGGGGCTCACCCACAGCGCGCTGTGCGCG 155
Db 61 CAATTCATGGACCGACCAACCCGCTGTCGGGGTTGACCCCAAGCGCGCTGTGCGCG 120
```

```
Qy 156 CTGGGCCCGGTGTGTCTGTCCCGGAGCGGCGCGGCTGGAGGTCCTCGACGTCGACCCG 215
Db 121 CTGGGGCCCGCGGTGTGTCTGTCACTGAGCGTGCCTGGGCTGGAGGTCCTCGACGTCGACCCG 180
Qy 216 TCCCACTACCGCGCGATGTGCCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACCGCGCGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
Qy 276 GGCTCGCTGTGCTGTATGCGCGGTCAACCCGTTTCGGGTTTCATCGAGACGCCGTACGGC 335
Db 241 GGCTCGCTGTGCTGTATGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACGCCGTACGGC 300
Qy 336 AAGTGTGTTCGACGCGGTGTTCACCGACGATTCACCTACCTGACCGCGCGACGAGGAGGAC 395
Db 301 AAGTGTGTTCGACGCGGTGTTCGACGAGATCGTGTACTGACCGCGCGACGAGGAGGAC 360
Qy 396 CGCCACGTGTGCGCGAGGCCAACTCGCCGATCGACGACAAAGGGCCGGTTCGCGGAGGCC 455
Db 361 CGCCACGTGTGCGCGAGGCCAACTTCGCCGATCGATCGGACGGTCTGTCGAGGCGC 420
Qy 456 CGGTGTGTGCTCGCGCGAGGGCGGCGAGGTTCGAGTACGTCCTCGTCCGAGGTGAC 515
Db 421 CGGTGTGTGCTCGCGCGAGGGCGGCGAGGTTCGAGTACGTCCTCGTCCGAGGTGAC 480
Qy 516 TACATGACGTCGTGCGCGCGACAGATGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTC 575
Db 481 TACATGACGTCGTGCGCGCGACAGATGGTGTGCGTGGCCACCGCGATGATTCCTTCCTG 540
Qy 576 GAGCACGACGACGACCAACCGTGCCTGATGGGCGCCAAACATGACGACGCCAGGGGGTTCG 635
Db 541 GAGCACGACGACGACCAACCGTGCCTCATGGGGGCAAAACATGACGACGCCAGGGGGTTCG 600
Qy 636 CTGCTGCGCAGCGAGGGCGC 655
Db 601 CTGCTGCGTAGCGAGGGCCCC 620

RESULT 9
US-08-757-653-138/c
; Sequence 138, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
```



```
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match 75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCAGTCGCGCGCATCAAGAGTTCTTCGGCACCAGCAGCTGTCC 95
Db 620 ATCAACATCCGCGCGGTGGTCGCCCGCATCAAGAGTTCTTCGGCACCAGCAGCTGAGC 561

Qy 96 CAGTTCTGACGACCAAGAAACCCGCTGTCGGGGCTCACCCACAAGCGCGCTGTCCGCG 155
Db 560 CAATTCTAGGACCAAGAAACCCGCTGTCGGGGTTGACCCACAGCGCGGACTGTCCGCG 501

Qy 156 CTGGGCCCGGGTGTCTCTCCCGGAGCGCGCGCGGTGGAGGTCCGCGAGCTGCACCCG 215
Db 500 CTGGGCCCGCGGTCTGTCTCACTGAGCGTGTCCGGGTGGAGGTCCGCGAGCTGCACCCG 441

Qy 216 TCCCACTACGCGCGGATGTCGCCGATCGAGACCCCGGAGGGTCCCAACATCGTCTGATC 275
Db 440 TCGCACTACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 381

Qy 276 GGCTCGCTGTCTGTCGCGCGGTCAACCCGTTTCGGGTTTCATCGAGACCGCGTACCGC 335
Db 380 GGCTCGCTGTCTGTCGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACCGCGTACCGC 321

Qy 336 AAGTGTGTGACGCGGTGGTCAACGACGAGATCCACTACGTCGCGCGCGAGGGCCGTCGCGGAGCC 455
Db 320 AAGTGTGTGACGCGGTGGTCAACGACGAGATCCGTTACTGACCGCGCGAGAGGAGC 261

Qy 396 CGCCACGTTGGGCGACGCCAATCTCGCGGATCGAGACAGGGCCGTTTCGCGGAGCC 455
Db 260 CGCCACGTTGGGCGACGCCAATCTCGCGGATCGATGCGGACGTCGCTTCGTTCGAGCGC 201

Qy 456 CGGGTGTCTGTCGCGCGGAGGTTCAGTACGTCGTCCTCTCGCGAGTGGAC 515
Db 200 CGGTCGTCTGTCGCGCGGAGGTTCAGTACGTCGTCCTCTCGTCGTCTGAGGTGGAC 141

Qy 516 TACATGACGTGTCTCGCGCGCAGATGTGTGTTGGCCACCGCGATGATCCCGTTCTC 575
Db 140 TACATGACGTGTCTCGCGCGCAGATGTGTGTTGGCCACCGCGATGATTCCTTCCTG 81

Qy 576 GAGCAGCAGCAGCGCCAAACCGTCCCTGATGGGCGCAACATGACGCGCAGCGGTTCCG 635
Db 80 GAGCAGCAGCAGCGCCAAACCGTCCCTGATGGGCGCAACATGACGCGCAGCGGTTCCG 21

Qy 636 CTGGTGCAGCAGGCGCC 655
Db 20 CTGGTGCAGGAGGCC 1

RESULT 10
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESS: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
```

```
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

Query Match 75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCAGTCGCGCGCATCAAGAGTTCTTCGGCACCAGCAGCTGTCC 95
Db 1 ATCAACATCCGCGCGGTGGTCGCCCGCATCAAGAGTTCTTCGGCACCAGCAGCTGAGC 60

Qy 96 CAGTTCTATGACCAAGAAACCCGCTGTCGGGGCTCACCCACAAGCGCGCTGTCCGCG 155
Db 61 CAATTCTAGGACCAAGAAACCCGCTGTCGGGGTTGACCCACAAGCGCGGACTGTCCGCG 120

Qy 156 CTGGGCCCGGGTGTCTCTCCCGGAGCGCGCGCTCGAGGTTCGCGACGTCGACCCG 215
Db 121 CTGGGCCCGCGGTCTCTCACTGAGCGTTCGCGGCTCGGAGGTTCGCGACGTCGACCCG 180

Qy 216 TCCCACTACGCGCGGATGTCGCCGATCGAGACCCCGGAGGTTCGCGACGTCGACCCG 275
Db 181 TCGCACTACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 240

Qy 276 GGCTCGCTGTCTGTCGCGCGGTCAACCCGTTTCGGGTTTCATCGAGACCGCGTACCGC 335
Db 241 GGCTCGCTGTCTGTCGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACCGCGTACCGC 300

Qy 336 AAGTGTGTTCAGCGCGGTGGTTCACCGAGATCCACTACCTGACCGCGCGAGGAGGAC 395
Db 301 AAGTGTGTTCAGCGCGGTGGTTCAGCGAGATCTGTCTGACCGCGCGAGGAGGAC 360

Qy 396 CGCCACGTTGGGCGAGGCCAATCTCGCGGATCGACGACAGGGCCGTTTCGCGGAGCC 455
Db 361 CGCCACGTTGGGCGAGGCCAATCTCGCGGATCGATGCGGACGTCGCTTCGTTCGAGCGC 420

Qy 456 CGGGTGTCTGTCGCGCGGAGGTTCAGTACGTCGTCCTCTCGTCGAGGTGGAC 515
Db 421 CGGTCGTCTGTCGCGCGGAGGTTCAGTACGTCGTCCTCTGTCGAGGTGGAC 480

Qy 516 TACATGACGTGTCTCGCGCGCAGATGTGTGTCGGTGGCCACCGCGATGATCCCGTTCTC 575
Db 481 TACATGACGTGTCTCGCGCGCAGATGTGTGTCGGTGGCCACCGCGATGATTCCTTCCTG 540

Qy 576 GAGCAGCAGCAGCGCCAAACCGTCCCTGATGGGCGCCCAACATGACGCGCAGCGGTTCCG 635
Db 541 GAGCAGCAGCAGCGCCAAACCGTCCCTGATGGGCGCCAAACATGACGCGCAGCGGTTCCG 600

Qy 636 CTGGTGCAGCAGGCGCC 655
```

```
Db      601 CTGTCCTAGCAGGCCCC 620

RESULT 11
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-138

Query Match      75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCAGTGGCGCGATCAAGAGTTCTTCGGCACCCAGCAGCTGTCC 95
Db      |||
Db      620 ATCAACATCCGTCAGTGGCGCGATCAAGAGTTCTTCGGCACCCAGCAGCTGAGC 561
Qy      96 CAGTTCATGACAGAACAAACCCGCTGTGGGGGTCAACCAAGACGCGCGCTGTGGCG 155
Db      |||
Db      560 CAATTATGACAGAACAAACCCGCTGTGGGGGTGACCAAGACGCGCGCTGTGGCG 501
Qy      156 CTGGCGCGGTGTCTGTCTCCGGGAGCGCGCGCTGGAGTCCGGAGCTGCACCG 215
Db      |||
Db      500 CTGGGCGCGGTGTCTGTCTACGTGAGCGTCCGGGTGGAGGTCCGCGAGCTGCACCG 441
Qy      216 TCCCACTACGCGCGGATGTGCCGATCAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db      |||
Db      440 TCGCACTACGCGCGGATGTGCCGATCGAACCCTCTAGGGGCCCAACATCGGTCTGATC 381
Qy      276 GGCTCGTGTGCGGTATGCGCGGTCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGC 335
Db      |||
Db      380 GGCTCGTGTGCGGTATGCGCGGTCAACCCGTTCCGGTTTCATCGAAGACGCCGTACCGC 321
Qy      336 AAGGTGTCGACGCGGTGTTCACGACGAGATCCTACTGACGCGCGGAGGAGGAC 395
Db      |||
Db      320 AAGGTGTCGACGCGGTGTTCAGCGACGAGATCTGTACTGACGCGCGGAGGAGGAC 261

Qy      396 CGCCACGTGTGGCGCAGGCAACTCGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCC 455
Db      |||
Db      260 CGCCACGTGTGGCACAGGCCAATTCCGCCGATCGATCGGACGGTCCGTTCTGTCGAGCCG 201
Qy      456 CGGGTGTGTTCGCGCGCAAGGCGGCGAGGTGAGTACGTGCCCTCTGTCGAGGTGAGC 515
Db      |||
Db      200 CGGTGTGTTCGCGCGCAAGGCGGCGAGGTGAGTACGTGCCCTCTGTCGAGGTGAGC 141
Qy      516 TACATGACGTGTGCGCGCGCGAGATGGTGTGGTGGCCACCGGATGATCCCGTTCCTC 575
Db      |||
Db      140 TACATGACGTGTGCGCGCGCGAGATGGTGTGGTGGCCACCGGATGATTCCTTCCTG 81
Qy      576 GAGCACGACGACGCAACCGTGCCTCATGATGGGCGCAACATGACGCGCCAGCGGTTCGG 635
Db      |||
Db      80 GAGCACGACGACGCAACCGTGCCTCATGATGGGCGCAACATGACGCGCCAGCGGTTCGG 21
Qy      636 CTGTGTCGACGAGGCGCC 655
Db      |||
Db      20 CTGTGTCGTAGCAGGCCCC 1

RESULT 12
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match      75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCAGTGGCGCGGATCAAGAGTTCTTCGGCACCCAGCAGCTGTCC 95
Db      |||
Db      1 ATCAACATCCGTCAGTGGCGCGGATCAAGAGTTCTTCGGCACCCAGCAGCTGAGC 60
```



```

CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
;
COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 136:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
;
US-08-757-653-136
Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 1.3e-101;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGTCGGCGCGATCAAGAGATTCTTCGGCACAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGCGGTGGTCGCCGATCAAGAGATTCTTCGGCACAGCCAGCTGAGC 60

QY 96 CAGTTTCATGGACCAAGAAACCCGCTGTCCGGGCTCACCACAAAGCCGCGCTGTCCGCG 155
DB 61 CAATTTCATGGACCAAGAAACCCGCTGTCCGGGTTGACCTTCAAGCGCGACTGTCCGCG 120

QY 156 CTGGGCCCGGGTGTCTGTCCCGGAGCGCGGCTGAGAGTCCGCGAGCTGCACCCG 215
DB 121 CTGGGCCCGGGTGTCTGTACGTGAGCTGCCGGGCTGAGAGTCCGCGAGCTGCACCCG 180

QY 216 TCCCACTACGCGCGGATGTGCCCGATCGAGACCCCGGAGGTTCCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

QY 276 GGCTCGCTGTCTGGTGTATGCGCGGTCAACCCGTTCTGGGTTTCATCGAGACCCGCTACCGC 335

CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
;
COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 137:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
;
US-08-757-653-137
Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 1.3e-101;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGTCGGCGCGATCAAGAGATTCTTCGGCACAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGCGGTGGTCGCCGATCAAGAGATTCTTCGGCACAGCCAGCTGAGC 60

QY 96 CAGTTTCATGGACCAAGAAACCCGCTGTCCGGGCTCACCACAAAGCCGCGCTGTCCGCG 155
DB 61 CAATTTCATGGACCAAGAAACCCGCTGTCCGGGTTGACCTTCAAGCGCGACTGTCCGCG 120

QY 156 CTGGGCCCGGGTGTCTGTCCCGGAGCGCGGCTGAGAGTCCGCGAGCTGCACCCG 215
DB 121 CTGGGCCCGGGTGTCTGTACGTGAGCTGCCGGGCTGAGAGTCCGCGAGCTGCACCCG 180

QY 216 TCCCACTACGCGCGGATGTGCCCGATCGAGACCCCGGAGGTTCCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

QY 276 GGCTCGCTGTCTGGTGTATGCGCGGTCAACCCGTTCTGGGTTTCATCGAGACCCGCTACCGC 335

CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
;
COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
;
US-08-757-653-138
Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 1.3e-101;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGTCGGCGCGATCAAGAGATTCTTCGGCACAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGCGGTGGTCGCCGATCAAGAGATTCTTCGGCACAGCCAGCTGAGC 60

QY 96 CAGTTTCATGGACCAAGAAACCCGCTGTCCGGGCTCACCACAAAGCCGCGCTGTCCGCG 155
DB 61 CAATTTCATGGACCAAGAAACCCGCTGTCCGGGTTGACCTTCAAGCGCGACTGTCCGCG 120

QY 156 CTGGGCCCGGGTGTCTGTCCCGGAGCGCGGCTGAGAGTCCGCGAGCTGCACCCG 215
DB 121 CTGGGCCCGGGTGTCTGTACGTGAGCTGCCGGGCTGAGAGTCCGCGAGCTGCACCCG 180

QY 216 TCCCACTACGCGCGGATGTGCCCGATCGAGACCCCGGAGGTTCCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

QY 276 GGCTCGCTGTCTGGTGTATGCGCGGTCAACCCGTTCTGGGTTTCATCGAGACCCGCTACCGC 335
```

Db	241	GGCTGCTGTCGTGTACGGCGGGTCAACCCGTTCCGGGTTTCATCGAAACGCCGTACCGC	300
Qy	336	AAGTGGTCGACGGCGTGTGTACCGACGAGATCCACTACTGACCGCCGACGAGGAGAC	395
Db	301	AAGGTGTCGACGGCGTGTGTAGCGACGAGATCGTGTACCTGACCGCCGACGAGGAGAC	360
Qy	396	CGCCACGTGGTGGCGCAGGCCAACTCGCCGATCGAGCAAGGGCGGGTTCCGGGAGGCC	455
Db	361	CGCCACGTGGTGGCA CAGGCCAAATTCGCCGATCGATGCGGACGGTTCGTCGAGCCG	420
Qy	456	CGGGTGTCTGGTCCGCCGCAAGGCGGCGGAGGTGAGTACGTGCCCTTCGTCGAGGTGGAC	515
Db	421	CGCGTGTCTGGTCCGCCGCAAGGCGGCGGAGGTGAGTACGTGCCCTTCGTCGAGGTGGAC	480
Qy	516	TACATGGACGTGTCCGCCGCGCAGATGTGTGGTGGCCACCGCGATGATCCCGTTCCTC	575
Db	481	TACATGGACGTGTCCGCCGCGCAGATGTGTGGTGGCCACCGCGATGATCCCTTCCTG	540
Qy	576	GAGCAGCAGCAGCCCAACCGTCCCTGATGGGGGCCCAACATGACGCGCCAGGCGGTCCG	635
Db	541	GAGCAGCAGCAGCCCAACCGTCCCTCATGGGGGCCAAACATGACGCGCCAGGCGGTCCG	600
Qy	636	CTGGTCCGACGCGAGGCGCC	655
Db	601	CTGGTCCGTAGCAGGCCCC	620

Search completed: August 24, 2005, 22:24:46
Job time : 114.459 secs

This Page Blank (usptc)

Result No.	Query			Description	
	Score	Match	Length	ID	
1	705	100.0	705	9	US-09-285-306-4
2	705	100.0	705	9	US-09-285-306-5
3	705	100.0	705	9	US-09-285-306-6
4	705	100.0	705	9	US-09-285-306-7
5	705	100.0	705	9	US-09-285-306-8
6	705	100.0	705	9	US-09-285-306-9
7	705	100.0	705	9	US-09-285-306-12
					Sequence 4, Appli
					Sequence 5, Appli
					Sequence 6, Appli
					Sequence 7, Appli
					Sequence 8, Appli
					Sequence 9, Appli
					Sequence 12, Appl

```

RESULT 1
US-09-285-306-4
; Sequence 4, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700S
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-4

```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Qy	61	CGATCAAGAGGATCTTTGGCACCACGACAGCTGTGCCAGTTCATGGAACAGAAACAACCCGG	120
Db	61	CGATCAAGAGGATCTTTGGCACCACGACAGCTGTGCCAGTTCATGGAACAGAAACAACCCGG	120
Qy	121	TGTCGGGGGTCAACCCACAAGAGCGCCCTGTCCGGCTTGGGCGCCGGGTGGTCTGTCCCGGG	180
Db	121	TGTCGGGGGTCAACCCACAAGAGCGCCCTGTCCGGCTTGGGCGCCGGGTGGTCTGTCCCGGG	180
Qy	181	AGCGGCGCGGGCTGGAGGTCCGCAAGCTGCAACCCGCTCCCACTACGGCCGGATGTGCCGA	240
Db	181	AGCGGCGCGGGCTGGAGGTCCGCAAGCTGCAACCCGCTCCCACTACGGCCGGATGTGCCGA	240
Qy	241	TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTTCGGTGTATGCGCGGG	300
Db	241	TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTTCGGTGTATGCGCGGG	300
Qy	301	TCAAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCGACGGCGTGGTCAACCG	360
Db	301	TCAAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCGACGGCGTGGTCAACCG	360
Qy	361	ACGAGATTCACACTCTGACACGCGCAGAGGAGGACCGCCACGCTGGTGGCGCAGGCCAACT	420
Db	361	ACGAGATTCACACTCTGACACGCGCAGAGGAGGACCGCCACGCTGGTGGCGCAGGCCAACT	420
Qy	421	CGCCGATCGACACCAAGGGCCGGTTCGCGGAGGCGCCGGGTCTCGTCCGCGCAGGGCGG	480
Db	421	CGCCGATCGACACCAAGGGCCGGTTCGCGGAGGCGCCGGGTCTCGTCCGCGCAGGGCGG	480
Qy	481	GCAGGTTCGAGTACGTGGCCCTCGTCCGAGGTGGACTACATGACGCTGTCCGCCGCGCAGA	540
Db	481	GCAGGTTCGAGTACGTGGCCCTCGTCCGAGGTGGACTACATGACGCTGTCCGCCGCGCAGA	540
Qy	541	TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGACGACGACGCCAACCGTGGCC	600
Db	541	TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGACGACGACGCCAACCGTGGCC	600
Qy	601	TGATGGGCGCCAAATGTCAGCGCCAGGGCGGTTCGCTTGGTTCGACGAGGCGCCGCTGG	660
Db	601	TGATGGGCGCCAAATGTCAGCGCCAGGGCGGTTCGCTTGGTTCGACGAGGCGCCGCTGG	660
Qy	661	TGGGCACCGGCATGAGCTGCGCGCGCGCATCGACGACGCGCGACGT	705
Db	661	TGGGCACCGGCATGAGCTGCGCGCGCGCATCGACGACGCGCGACGT	705

RESULT 2

```

US-09-285-306-5
; Sequence 5, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 5
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-5

```

RESULT 3

```

US-09-285-306-6
; Sequence 6, Application US/09285306A
; Publication No. US20020184767A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185701US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 191
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-6

```

Best Local Similarity 100.0%, Fied. NO. 8.5E-136,
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCAGGACGTGGAGGCGATCACCCGAGACCCCTGATCAATCGCTCCAGTCGTGGCGG 60

QY 1 CCCAGGACGTGGAGCGGATCAACCCGAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
 DB 1 CCCAGGACGTGGAGCGGATCAACCCGAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
 QY 61 CGATCAAGGAGTCTTTCGGCACCAAGCGCTGTCCAGTTCATGAGCAGAACACCCGC 120
 DB 61 CGATCAAGGAGTCTTTCGGCACCAAGCGCTGTCCAGTTCATGAGCAGAACACCCGC 120
 QY 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGCGCTGGCCCGGGTGGTCTGTCCCGG 180
 DB 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGCGCTGGCCCGGGTGGTCTGTCCCGG 180
 QY 181 AGCGGGCGGGCTGAGGTCCGCGAGTGCACCGTCCCACTACCGCCGAGTGTCCCGGA 240
 DB 181 AGCGGGCGGGCTGAGGTCCGCGAGTGCACCGTCCCACTACCGCCGAGTGTCCCGGA 240
 QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGGTGTATGCGCGG 300
 DB 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGGTGTATGCGCGG 300
 QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGGTGTGACCGCGTGTCAAC 360
 DB 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGGTGTGACCGCGTGTCAAC 360
 QY 361 ACGAGATCCACTACCTGACCGCGAGGAGCGCCACGTGTGGCGAGGCCAACT 420
 DB 361 ACGAGATCCACTACCTGACCGCGAGGAGCGCCACGTGTGGCGAGGCCAACT 420
 QY 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGGAGGCGCGGTTGCTGTCGCGCGCAAGGCGG 480
 DB 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGGAGGCGCGGTTGCTGTCGCGCGCAAGGCGG 480
 QY 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGAATACATGACAGTGTGCGCGCGCAGA 540
 DB 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGAATACATGACAGTGTGCGCGCGCAGA 540
 QY 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGCAGACGACGACCGTGTGCC 600
 DB 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGCAGACGACGACCGTGTGCC 600
 QY 601 TGATGGCGCCAAATGACGCGCCAGGCGGTTTCGCTGTGCGCAGCAGGCGCGCTGG 660
 DB 601 TGATGGCGCCAAATGACGCGCCAGGCGGTTTCGCTGTGCGCAGCAGGCGCGCTGG 660
 QY 661 TGGGACCGGCTATGAGTGTGCGCGCGCGATCGACGCGCGACGT 705
 DB 661 TGGGACCGGCTATGAGTGTGCGCGCGCGATCGACGCGCGACGT 705

RESULT 4

US-09-285-306-7
 ; Sequence 7, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Gengeras, Thomas
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 7
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-7

Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 8.2e-156;

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CCCAGGACGTGGAGCGGATCAACCCGAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
 DB 1 CCCAGGACGTGGAGCGGATCAACCCGAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
 QY 61 CGATCAAGGAGTCTTTCGGCACCAAGCGCTGTCCAGTTCATGAGCAGAACACCCGC 120
 DB 61 CGATCAAGGAGTCTTTCGGCACCAAGCGCTGTCCAGTTCATGAGCAGAACACCCGC 120
 QY 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGCGCTGGCCCGGGTGGTCTGTCCCGG 180
 DB 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGCGCTGGCCCGGGTGGTCTGTCCCGG 180
 QY 181 AGCGGGCGGGCTGAGGTCCGCGAGTGCACCGTCCCACTACCGCCGAGTGTCCCGGA 240
 DB 181 AGCGGGCGGGCTGAGGTCCGCGAGTGCACCGTCCCACTACCGCCGAGTGTCCCGGA 240
 QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGGTGTATGCGCGG 300
 DB 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGGTGTATGCGCGG 300
 QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGGTGTGACCGCGTGTCAAC 360
 DB 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGGTGTGACCGCGTGTCAAC 360
 QY 361 ACGAGATCCACTACCTGACCGCGAGGAGCGCCACGTGTGGCGAGGCCAACT 420
 DB 361 ACGAGATCCACTACCTGACCGCGAGGAGCGCCACGTGTGGCGAGGCCAACT 420
 QY 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGGAGGCGCGGTTGCTGTCGCGCGCAAGGCGG 480
 DB 421 CGCCGATCGACGACAAAGGCGCGGTTTCGGGAGGCGCGGTTGCTGTCGCGCGCAAGGCGG 480
 QY 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGAATACATGACAGTGTGCGCGCGCAGA 540
 DB 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGAATACATGACAGTGTGCGCGCGCAGA 540
 QY 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGCAGACGACGACCGTGTGCC 600
 DB 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGCAGACGACGACCGTGTGCC 600
 QY 601 TGATGGCGCCAAATGACGCGCCAGGCGGTTTCGCTGTGCGCAGCAGGCGCGCTGG 660
 DB 601 TGATGGCGCCAAATGACGCGCCAGGCGGTTTCGCTGTGCGCAGCAGGCGCGCTGG 660
 QY 661 TGGGACCGGCTATGAGTGTGCGCGCGCGATCGACGCGCGACGT 705
 DB 661 TGGGACCGGCTATGAGTGTGCGCGCGCGATCGACGCGCGACGT 705

RESULT 5

US-09-285-306-8
 ; Sequence 8, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Gengeras, Thomas
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 8
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-8

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGCGATCACCGCAGACCCCTGATCAACATCGTCCAGTCTGGCGG 60
Db 1 CCCAGGAGCTGGAGCGATCACCGCAGACCCCTGATCAACATCGTCCAGTCTGGCGG 60

Qy 61 CGATCAAGAGGTTCTTCCGACACGACGCTGTCCTCAGTTTCATGACCAACAAACCCG 120
Db 61 CGATCAAGAGGTTCTTCCGACACGACGCTGTCCTCAGTTTCATGACCAACAAACCCG 120

Qy 121 TGTCCGGGCTCACCCACAAGCCCGCTGTGCGGCGCTGGGCGCGGTGCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCCCGCTGTGCGGCGCTGGGCGCGGTGCTGTCCCGGG 180

Qy 181 AGCGGCGCGGCTGGAGTTCGCGACGTGCAACCGTCCACTACGCGCGGATGTCGCCGA 240
Db 181 AGCGGCGCGGCTGGAGTTCGCGACGTGCAACCGTCCACTACGCGCGGATGTCGCCGA 240

Qy 241 TCGAGACCCCGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATCGCGGG 300
Db 241 TCGAGACCCCGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATCGCGGG 300

Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGTCGACGGCGTGTACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGTCGACGGCGTGTACCG 360

Qy 361 ACGAGATCCACTACTGACCGCGACGAGGAGGACCGCCAGCTGCTGGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCGCGACGAGGAGGACCGCCAGCTGCTGGTGGCGAGGCCAACT 420

Qy 421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCCGGTCTGTCGCGCGAAGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCCGGTCTGTCGCGCGAAGCGG 480

Qy 481 GCGAGGTCGAGTACGTCGCTCGTCCGAGGTGGAATACATGAGAGTGTGTCGCGCGCAGA 540
Db 481 GCGAGGTCGAGTACGTCGCTCGTCCGAGGTGGAATACATGAGAGTGTGTCGCGCGCAGA 540

Qy 541 TGGTGTCCGTTGCCACCGCGATGATCCCGTTCTTCGAGCAGACGCGCAACCGTGC 600
Db 541 TGGTGTCCGTTGCCACCGCGATGATCCCGTTCTTCGAGCAGACGCGCAACCGTGC 600

Qy 601 TGATGGGCGCCAAATGACGCGCGGCTTCGCTGTCGCGAGGAGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACGCGCGGCTTCGCTGTCGCGAGCGAGCGCGCTGG 660

Qy 661 TGGGACCGGATGGAGTTCGCGCGCGGATCGACGCGGCGACGT 705
Db 661 TGGGACCGGATGGAGTTCGCGCGCGGATCGACGCGGCGACGT 705

RESULT 6

US-09-285-306-9
; Sequence 9, Application US/09285306A
; Publication No. US20020187467A1

GENERAL INFORMATION:

; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER APPLICATION NUMBER: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 9

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-9

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGCGATCACCGCAGACCCCTGATCAACATCCGTCAGTCCAGTCTGGCGG 60
Db 1 CCCAGGAGCTGGAGCGATCACCGCAGACCCCTGATCAACATCCGTCAGTCCAGTCTGGCGG 60

Qy 61 CGATCAAGAGGTTCTTCCGACACGACGCTGTCCTCAGTTTCATGACCAACAAACCCG 120
Db 61 CGATCAAGAGGTTCTTCCGACACGACGCTGTCCTCAGTTTCATGACCAACAAACCCG 120

Qy 121 TGTCCGGGCTCACCCACAAGCGCGCTGTGCGGCGCTGGGCGCGGTGCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCGCTGTGCGGCGCTGGGCGCGGTGCTGTCCCGGG 180

Qy 181 AGCGGCGCGGCTGGAGTTCGCGACGTGCAACCGTCCACTACGCGCGGATGTCGCCGA 240
Db 181 AGCGGCGCGGCTGGAGTTCGCGACGTGCAACCGTCCACTACGCGCGGATGTCGCCGA 240

Qy 241 TCGAGACCCCGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGCGGG 300
Db 241 TCGAGACCCCGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGCGGG 300

Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGTCGACGGCGTGTACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGGTGTCGACGGCGTGTACCG 360

Qy 361 ACGAGATCCACTACTGACCGCGACGAGGAGGACCGCCAGCTGCTGGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCGCGACGAGGAGGACCGCCAGCTGCTGGTGGCGAGGCCAACT 420

Qy 421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCCGGTCTGTCGCGCGAAGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCCGGTCTGTCGCGCGAAGCGG 480

Qy 481 GCGAGGTCGAGTACGTCGCTCGTCCGAGGTGGAATACATGAGAGTGTGTCGCGCGCAGA 540
Db 481 GCGAGGTCGAGTACGTCGCTCGTCCGAGGTGGAATACATGAGAGTGTGTCGCGCGCAGA 540

Qy 541 TGGTGTCCGTTGCCACCGCGATGATCCCGTTCTTCGAGCAGACGCGCAACCGTGC 600
Db 541 TGGTGTCCGTTGCCACCGCGATGATCCCGTTCTTCGAGCAGACGCGCAACCGTGC 600

Qy 601 TGATGGGCGCCAAATGACGCGCGGCTTCGCTGTCGCGAGGAGCGCGCTGG 660
Db 601 TGATGGGCGCCAAATGACGCGCGGCTTCGCTGTCGCGAGCGAGCGCGCTGG 660

Qy 661 TGGGACCGGATGGAGTTCGCGCGCGGATCGACGCGGCGACGT 705
Db 661 TGGGACCGGATGGAGTTCGCGCGCGGATCGACGCGGCGACGT 705

RESULT 7

US-09-285-306-12
; Sequence 12, Application US/09285306A
; Publication No. US20020187467A1

GENERAL INFORMATION:

; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER APPLICATION NUMBER: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 705

```
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-12

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGACGTGAGGCGATCACACGCGAGACCTGATCAACATCCGTCAGTCGTGGCGG 60
   |||||
Db 1 CCCAGACGTGAGGCGATCACACGCGAGACCTGATCAACATCCGTCAGTCGTGGCGG 60
   |||||
QY 61 CGATCAAGAGTCTTTCGGCACGACGAGCTGTCGAGTTCATGACACGACACACCGC 120
   |||||
Db 61 CGATCAAGAGTCTTTCGGCACGACGAGCTGTCGAGTTCATGACACGACACACCGC 120
   |||||
QY 121 TGTGGGGCTACCCACAAAGCGCGCTGTGCGGCGTGGGCGGCTGTGTCTGTCCCGG 180
   |||||
Db 121 TGTGGGGCTACCCACAAAGCGCGCTGTGCGGCGTGGGCGGCTGTGTCTGTCCCGG 180
   |||||
QY 181 AGCGGGCGGGCTGAGGTCGCGAGCTGACCCGTCACCGTCCCACTACGGCCGGATGTGCCGA 240
   |||||
Db 181 AGCGGGCGGGCTGAGGTCGCGAGCTGACCCGTCACCGTCCCACTACGGCCGGATGTGCCGA 240
   |||||
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGCGG 300
   |||||
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGCGG 300
   |||||
QY 301 TCAACCCGTTCCGGTTTCATCGAGAGCGCGTACCGCAAGGTGTCGACGGCGTGTGTCACCG 360
   |||||
Db 301 TCAACCCGTTCCGGTTTCATCGAGAGCGCGTACCGCAAGGTGTCGACGGCGTGTGTCACCG 360
   |||||
QY 361 ACGAGATCCACTACTGACCCGCGAGGAGGACCGCACTGTGTGGCGCAGGCCAACT 420
   |||||
Db 361 ACGAGATCCACTACTGACCCGCGAGGAGGACCGCACTGTGTGGCGCAGGCCAACT 420
   |||||
QY 421 CGCCGATCGACACAAAGGCGGTTTCGGAGGCGCGGTTGCTGCTGCGCGCAAGGCGG 480
   |||||
Db 421 CGCCGATCGACACAAAGGCGGTTTCGGAGGCGCGGTTGCTGCTGCGCGCAAGGCGG 480
   |||||
QY 481 GCGAGTCCAGTACCTGCTCGAGGTGGAATACATGACGCTGTGCGCGCGCCAGA 540
   |||||
Db 481 GCGAGTCCAGTACCTGCTCGAGGTGGAATACATGACGCTGTGCGCGCGCCAGA 540
   |||||
QY 541 TGGTGTGGTGCCACCGCGATGATCCGTTCTTCGAGCAACAACCGTGTGCC 600
   |||||
Db 541 TGGTGTGGTGCCACCGCGATGATCCGTTCTTCGAGCAACAACCGTGTGCC 600
   |||||
QY 601 TGATGGGCGCAACATGACGCGCGGCTGCGGCTGTCGCGAGGCGGCGGCTGG 660
   |||||
Db 601 TGATGGGCGCAACATGACGCGCGGCTGCGGCTGTCGCGAGGCGGCGGCTGG 660
   |||||
QY 661 TGGGCACCGGCATGGAGCTGCGCGCGGCGATCGACGCGCGGCGACT 705
   |||||
Db 661 TGGGCACCGGCATGGAGCTGCGCGCGGCGATCGACGCGCGGCGACT 705
   |||||
```

RESULT 8

```
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
```

RESULT 9

```
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
```

```
; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-13
```

```
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGACGTGAGGCGATCACACGCGAGACCTGATCAACATCCGTCAGTCGTGGCGG 60
   |||||
Db 1 CCCAGACGTGAGGCGATCACACGCGAGACCTGATCAACATCCGTCAGTCGTGGCGG 60
   |||||
QY 61 CGATCAAGAGTCTTTCGGCACGACGAGCTGTCGAGTTCATGACACGACACACCGC 120
   |||||
Db 61 CGATCAAGAGTCTTTCGGCACGACGAGCTGTCGAGTTCATGACACGACACACCGC 120
   |||||
QY 121 TGTGGGGCTACCCACAAAGCGCGCTGTGCGGCGTGGGCGGCTGTGTCTGTCCCGG 180
   |||||
Db 121 TGTGGGGCTACCCACAAAGCGCGCTGTGCGGCGTGGGCGGCTGTGTCTGTCCCGG 180
   |||||
QY 181 AGCGGGCGGGCTGAGGTCGCGAGCTGACCCGTCACCGTCCCACTACGGCCGGATGTGCCGA 240
   |||||
Db 181 AGCGGGCGGGCTGAGGTCGCGAGCTGACCCGTCACCGTCCCACTACGGCCGGATGTGCCGA 240
   |||||
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGCGG 300
   |||||
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGCGG 300
   |||||
QY 301 TCAACCCGTTCCGGTTTCATCGAGAGCGCGTACCGCAAGGTGTCGACGGCGTGTGTCACCG 360
   |||||
Db 301 TCAACCCGTTCCGGTTTCATCGAGAGCGCGTACCGCAAGGTGTCGACGGCGTGTGTCACCG 360
   |||||
QY 361 ACGAGATCCACTACTGACCCGCGAGGAGGACCGCACTGTGTGGCGCAGGCCAACT 420
   |||||
Db 361 ACGAGATCCACTACTGACCCGCGAGGAGGACCGCACTGTGTGGCGCAGGCCAACT 420
   |||||
QY 421 CGCCGATCGACACAAAGGCGGTTTCGGAGGCGCGGTTGCTGCTGCGCGCAAGGCGG 480
   |||||
Db 421 CGCCGATCGACACAAAGGCGGTTTCGGAGGCGCGGTTGCTGCTGCGCGCAAGGCGG 480
   |||||
QY 481 GCGAGTCCAGTACCTGCTCGAGGTGGAATACATGACGCTGTGCGCGCGCCAGA 540
   |||||
Db 481 GCGAGTCCAGTACCTGCTCGAGGTGGAATACATGACGCTGTGCGCGCGCCAGA 540
   |||||
QY 541 TGGTGTGGTGCCACCGCGATGATCCGTTCTTCGAGCAACAACCGTGTGCC 600
   |||||
Db 541 TGGTGTGGTGCCACCGCGATGATCCGTTCTTCGAGCAACAACCGTGTGCC 600
   |||||
QY 601 TGATGGGCGCAACATGACGCGCGGCTGCGGCTGTCGCGAGGCGGCGGCTGG 660
   |||||
Db 601 TGATGGGCGCAACATGACGCGCGGCTGCGGCTGTCGCGAGGCGGCGGCTGG 660
   |||||
QY 661 TGGGCACCGGCATGGAGCTGCGCGCGGCGATCGACGCGCGGCGACT 705
   |||||
Db 661 TGGGCACCGGCATGGAGCTGCGCGCGGCGATCGACGCGCGGCGACT 705
   |||||
```

```

; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGCGATCAACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 1 CCCAGAGCTGGAGCGATCAACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60

QY 61 CGATCAAGGAGTTCTTCGGCACCAGCAGCTGTCCAGTTTCATGACAGCAACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCAGCAGCTGTCCAGTTTCATGACAGCAACCCGC 120

QY 121 TGTCCGGGCTCACCCACAAGCGCCCTGTCCGGCTGGGCGCGGTGCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCCCTGTCCGGCTGGGCGCGGTGCTGTCCCGGG 180

QY 181 AGCGGCGCGGCTGGAGTCCCGCAGCTGCACCCCTGCCACTACGCGCGGATGCCCCGA 240
Db 181 AGCGGCGCGGCTGGAGTCCCGCAGCTGCACCCCTGCCACTACGCGCGGATGCCCCGA 240

QY 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGCGTGTATGGCGGG 300
Db 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGCGTGTATGGCGGG 300

QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTGACCGCAAGGTGGTTCAGCGCGTGGTCAACG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTGACCGCAAGGTGGTTCAGCGCGTGGTCAACG 360

QY 361 ACGAGATCCACTACCTGACCGCGCAGAGGAGGACCCGCAAGTGGTGGCGCAGGCGG 420
Db 361 ACGAGATCCACTACCTGACCGCGCAGAGGAGGACCCGCAAGTGGTGGCGCAGGCGG 420

QY 421 CGCGATCGAGTACGTCGCCCTCGTCCGAGGCGCGGTTCGCGGAGGCGCGGTGCTGTCGCCGCGCAGG 480
Db 421 CGCGATCGAGTACGTCGCCCTCGTCCGAGGCGCGGTTCGCGGAGGCGCGGTGCTGTCGCCGCGCAGG 480

QY 481 GCGAGGTGAGTACGTCGCCCTCGTCCGAGGCGCGGTTCGCGGAGGCGCGGTGCTGTCGCCGCGCAGG 540
Db 481 GCGAGGTGAGTACGTCGCCCTCGTCCGAGGCGCGGTTCGCGGAGGCGCGGTGCTGTCGCCGCGCAGG 540

QY 541 TGGTGTCCGGTGGCCACCGCGATGATCCCGTTCCCTCGAGCAGCAGACGCCAACCGTGCCC 600
Db 541 TGGTGTCCGGTGGCCACCGCGATGATCCCGTTCCCTCGAGCAGCAGACGCCAACCGTGCCC 600

QY 601 TGATGGCGCCCAACATGACAGCGCCAGCGGTTCGCTGGTGGCGAGCGCGCGTGG 660
Db 601 TGATGGCGCCCAACATGACAGCGCCAGCGGTTCGCTGGTGGCGAGCGCGCGTGG 660

QY 661 TGGGCACCGGATGGAGCTGCGCGCGGCGATCGACGCGCGGACGT 705
Db 661 TGGGCACCGGATGGAGCTGCGCGCGGCGATCGACGCGCGGACGT 705

```

```

RESULT 10
US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gieras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
;

```

```

; EARLIER APPLICATION NUMBER: US 60/080.616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-16

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGCGATCAACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 1 CCCAGAGCTGGAGCGATCAACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60

QY 61 CGATCAAGGAGTTCTTCGGCACCAGCAGCTGTCCAGTTTCATGACAGCAACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCAGCAGCTGTCCAGTTTCATGACAGCAACCCGC 120

QY 121 TGTCCGGGCTCACCCACAAGCGCCCTGTCCGGCTGGGCGCGGTGCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCCCTGTCCGGCTGGGCGCGGTGCTGTCCCGGG 180

QY 181 AGCGGCGCGGCTGGAGTCCCGCAGCTGCACCCCTGCCACTACGCGCGGATGCCCCGA 240
Db 181 AGCGGCGCGGCTGGAGTCCCGCAGCTGCACCCCTGCCACTACGCGCGGATGCCCCGA 240

QY 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGCGTGTATGGCGGG 300
Db 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGCGTGTATGGCGGG 300

QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTGACCGCAAGGTGGTTCAGCGCGTGGTCAACG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTGACCGCAAGGTGGTTCAGCGCGTGGTCAACG 360

QY 361 ACGAGATCCACTACCTGACCGCGCAGAGGAGGACCCGCAAGTGGTGGCGCAGGCGG 420
Db 361 ACGAGATCCACTACCTGACCGCGCAGAGGAGGACCCGCAAGTGGTGGCGCAGGCGG 420

QY 421 CGCGATCGAGTACGTCGCCCTCGTCCGAGGCGCGGTTCGCGGAGGCGCGGTGCTGTCGCCGCGCAGG 480
Db 421 CGCGATCGAGTACGTCGCCCTCGTCCGAGGCGCGGTTCGCGGAGGCGCGGTGCTGTCGCCGCGCAGG 480

QY 481 GCGAGGTGAGTACGTCGCCCTCGTCCGAGGCGCGGTTCGCGGAGGCGCGGTGCTGTCGCCGCGCAGG 540
Db 481 GCGAGGTGAGTACGTCGCCCTCGTCCGAGGCGCGGTTCGCGGAGGCGCGGTGCTGTCGCCGCGCAGG 540

QY 541 TGGTGTCCGGTGGCCACCGCGATGATCCCGTTCCCTCGAGCAGCAGACGCCAACCGTGCCC 600
Db 541 TGGTGTCCGGTGGCCACCGCGATGATCCCGTTCCCTCGAGCAGCAGACGCCAACCGTGCCC 600

QY 601 TGATGGCGCCCAACATGACAGCGCCAGCGGTTCGCTGGTGGCGAGCGCGCGTGG 660
Db 601 TGATGGCGCCCAACATGACAGCGCCAGCGGTTCGCTGGTGGCGAGCGCGCGTGG 660

QY 661 TGGGCACCGGATGGAGCTGCGCGCGGCGATCGACGCGCGGACGT 705
Db 661 TGGGCACCGGATGGAGCTGCGCGCGGCGATCGACGCGCGGACGT 705

```

```

RESULT 11
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gieras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
;

```

; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156; Indels 0; Gaps 0;
Matches 705; Conservative 0; Mismatches 0;
Qy 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAATCCGTCACAGTCTGGGCGG 60
Db 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAATCCGTCACAGTCTGGGCGG 60
Qy 61 CGATCAAGAGGTTCTTCGGCACACGACAGCTGTCTCCAGTTTATGACACAGAACACCCGC 120
Db 61 CGATCAAGAGGTTCTTCGGCACACGACAGCTGTCTCCAGTTTATGACACAGAACACCCGC 120
Qy 121 TGTCCGGGCTCACCCACAGCGCCGCTGTTCGGCGCTGGGCGGCTGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAGCGCCGCTGTTCGGCGCTGGGCGGCTGTCTGTCCCGGG 180
Qy 181 AGCGGGCGGGCTGGAGGTCGCGACGTGACCCGCTCCCACTACCGCCGGATGTCCCGGA 240
Db 181 AGCGGGCGGGCTGGAGGTCGCGACGTGACCCGCTCCCACTACCGCCGGATGTCCCGGA 240
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCTGTATGCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCTGTATGCGCGGG 300
Qy 301 TCAACCCGTTCCGGGTTTCATCGAGACGCGGTACCGCAAGGTGTGTCACGCGTGTACCG 360
Db 301 TCAACCCGTTCCGGGTTTCATCGAGACGCGGTACCGCAAGGTGTGTCACGCGTGTACCG 360
Qy 361 ACGAGATCCACTTACCTGACCGCGCAGAGGAGCCGCAAGTGTGGCGAGGCGCAACT 420
Db 361 ACGAGATCCACTTACCTGACCGCGCAGAGGAGCCGCAAGTGTGGCGAGGCGCAACT 420
Qy 421 CGCCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCGGTTGTGTCTCCCGCAAGGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCGGTTGTGTCTCCCGCAAGGCGG 480
Qy 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTATCATGGAAGTGTGGCGCGCCAGA 540
Db 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTATCATGGAAGTGTGGCGCGCCAGA 540
Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGACGACCGTGTGCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGACGACCGTGTGCC 600
Qy 601 TGATGGCGCCCAATATGACGCCAGGCGGTTTCGCTGTGTCGACGAGGCGCGCTGG 660
Db 601 TGATGGCGCCCAATATGACGCCAGGCGGTTTCGCTGTGTCGACGAGGCGCGCTGG 660
Qy 661 TGGGACCCGGCATGGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db 661 TGGGACCCGGCATGGAGCTGCGCGCGCGATCGACGCGCGACGT 705

RESULT 12
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

Query Match 99.8%; Score 703.4; DB 9; Length 705;
Best Local Similarity 99.9%; Pred. No. 1.9e-155; Indels 0; Gaps 0;
Matches 704; Conservative 0; Mismatches 1;
Qy 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAATCCGTCACAGTCTGGGCGG 60
Db 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAATCCGTCACAGTCTGGGCGG 60
Qy 61 CGATCAAGAGGTTCTTCGGCACACGACAGCTGTCTCCAGTTTATGACACAGAACACCCGC 120
Db 61 CGATCAAGAGGTTCTTCGGCACACGACAGCTGTCTCCAGTTTATGACACAGAACACCCGC 120
Qy 121 TGTCCGGGCTCACCCACAGCGCCGCTGTTCGGCGCTGGGCGGCTGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAGCGCCGCTGTTCGGCGCTGGGCGGCTGTCTGTCCCGGG 180
Qy 181 AGCGGGCGGGCTGGAGGTCGCGACGTGACCCGCTCCCACTACCGCCGGATGTCCCGGA 240
Db 181 AGCGGGCGGGCTGGAGGTCGCGACGTGACCCGCTCCCACTACCGCCGGATGTCCCGGA 240
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCTGTATGCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCTGTATGCGCGGG 300
Qy 301 TCAACCCGTTCCGGGTTTCATCGAGACGCGGTACCGCAAGGTGTGTCACGCGTGTACCG 360
Db 301 TCAACCCGTTCCGGGTTTCATCGAGACGCGGTACCGCAAGGTGTGTCACGCGTGTACCG 360
Qy 361 ACGAGATCCACTTACCTGACCGCGCAGAGGAGCCGCAAGTGTGGCGAGGCGCAACT 420
Db 361 ACGAGATCCACTTACCTGACCGCGCAGAGGAGCCGCAAGTGTGGCGAGGCGCAACT 420
Qy 421 CGCCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCGGTTGTGTCTCCCGCAAGGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCGGTTGTGTCTCCCGCAAGGCGG 480
Qy 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTATCATGGAAGTGTGGCGCGCCAGA 540
Db 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTATCATGGAAGTGTGGCGCGCCAGA 540
Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGACGACCGTGTGCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGACGACCGTGTGCC 600
Qy 601 TGATGGCGCCCAATATGACGCCAGGCGGTTTCGCTGTGTCGACGAGGCGCGCTGG 660
Db 601 TGATGGCGCCCAATATGACGCCAGGCGGTTTCGCTGTGTCGACGAGGCGCGCTGG 660
Qy 661 TGGGACCCGGCATGGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db 661 TGGGACCCGGCATGGAGCTGCGCGCGCGATCGACGCGCGACGT 705

RESULT 13
US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas

```
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 1.8e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGCGATCAACCGCAGACCCCTGATCAACATCGTCCAGTCGTGGCGG 60
Db 1 CCCAGGAGCTGGAGCGATCAACCGCAGACCCCTGATCAACATCGTCCAGTCGTGGCGG 60

Qy 61 CGATCAAGGAGTTCTTCGGCCACCAGCAGCTGTCTCCAGTTTCATGACCCAGAACACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCCACCAGCAGCTGTCTCCAGTTTCATGACCCAGAACACCCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCCGCCCTGTGCGGCGCTGGGCCCGGGTGGTCTGTCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCCGCCCTGTGCGGCGCTGGGCCCGGGTGGTCTGTCGGG 180

Qy 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCAACCGTCCACCTGATCGGTCGCTGATCGGCGG 240
Db 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCAACCGTCCACCTGATCGGTCGCTGATCGGCGG 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGCTGATCGGTCGCTGATCGGTCGCTGATCGGCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGCTGATCGGTCGCTGATCGGTCGCTGATCGGCGG 300

Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGGCGTGGTCA 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGGCGTGGTCA 360

Qy 361 ACGAGATCCACTACTGACCCCGCAGAGGAGGACCGCAGCTGCTGGCGGAGGCCCAACT 420
Db 361 ACGAGATCCACTACTGACCCCGCAGAGGAGGACCGCAGCTGCTGGCGGAGGCCCAACT 420

Qy 421 CGCCGATCGACGACAAGGCGCGGTTTCGCGGAGGCGCGGTCGTGGTCCCGCCAGGCGG 480
Db 421 CGCCGATCGACGACAAGGCGCGGTTTCGCGGAGGCGCGGTCGTGGTCCCGCCAGGCGG 480

Qy 481 GCGAGGTCGAGTACGTGTCCTCGTCCGAGGTGGACTACATGGAAGTGGTTCGCGCGG 540
Db 481 GCGAGGTCGAGTACGTGTCCTCGTCCGAGGTGGACTACATGGAAGTGGTTCGCGCGG 540

Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCCTCGAGCAGACGACGACCGCAACCGT 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCCTCGAGCAGACGACGACCGCAACCGT 600

Qy 601 TCATGGGCGCCAAATGACAGGCCAGCGCGTTTCGCTGGTGGCGAGCGCGCGCTGG 660
Db 601 TCATGGGCGCCAAATGACAGGCCAGCGCGTTTCGCTGGTGGCGAGCGCGCGCTGG 660

Qy 661 TGGGACCGGCATGAGAGCTGCGCGCGCGCATCGACGCGGCGACGT 705
```

```
Db 661 TGGGACCGGCATGAGAGCTGCGCGCGCGCATCGACGCGGCGACGT 705

RESULT 14
US-09-285-306-11
; Sequence 11, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-11

Query Match      98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 4.3e-153;
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60

Qy 61 CGATCAAGGAGTTCTTCGGCACCAGCAGCTGTCTCCAGTTTCATGGAACAGAACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCAGCAGCTGTCTCCAGTTTCATGGAACAGAACCCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCGCGCTGTGCGGCGCTGGGCCCGGGTGGTCTGTCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCGCTGTGCGGCGCTGGGCCCGGGTGGTCTGTCGGG 180

Qy 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCGCAGCTGCAACCCGTCCTCCACTACGCGCGGATG 240
Db 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCGCAGCTGCAACCCGTCCTCCACTACGCGCGGATG 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGATCGGTCGCTGCTGGTGTATCGGCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGATCGGTCGCTGCTGGTGTATCGGCGG 300

Qy 301 TCACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGGCGTGGTCA 360
Db 301 TCACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGGCGTGGTCA 360

Qy 361 ACGAGATCCACTACTGACCCCGCAGAGGAGGACCGCAGCTGCTGGCGGAGGCCCAACT 420
Db 361 ACGAGATCCACTACTGACCCCGCAGAGGAGGACCGCAGCTGCTGGCGGAGGCCCAACT 420

Qy 421 CGCGGATCGACGACAAGGCGCGGTTTCGCGGAGGCGCGGTCGTGGTCCCGCCAGGCGG 480
Db 421 CGCGGATCGACGACAAGGCGCGGTTTCGCGGAGGCGCGGTCGTGGTCCCGCCAGGCGG 480

Qy 481 GCGAGGTCGAGTACGTGTCCTCGTCCGAGGTGGACTACATGGAAGTGGTTCGCGCGG 540
Db 481 GCGAGGTCGAGTACGTGTCCTCGTCCGAGGTGGACTACATGGAAGTGGTTCGCGCGG 540

Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCCTCGAGCAGACGACGACCGCAACCGT 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCCTCGAGCAGACGACGACCGCAACCGT 600

Qy 601 TCATGGGCGCCAAATGACAGGCCAGCGCGTTTCGCTGGTGGCGAGCGCGCGCTGG 660
Db 601 TCATGGGCGCCAAATGACAGGCCAGCGCGTTTCGCTGGTGGCGAGCGCGCGCTGG 660

Qy 661 TGGGACCGGCATGAGAGCTGCGCGCGCGCATCGACGCGGCGACGT 705
```

QY 541 TGGTGTGGTGGCCACCGCGATGCCGTTCTCGAGCACGACGACCGCAACCGTGCCC 600
Db |||||
QY 541 TGGTGTGGTGGCCACCGCGATGCCGTTCTCGAGCACGACGACCGCAACCGTGCCC 600
Db |||||
QY 601 TGATGGGCGCCCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCGACGAGGCGCGCTGG 660
Db |||||
QY 601 TGATGGGCGCCCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCGACGAGGCGCGCTGG 660
QY 661 TGGGACCGCGCATGAGCTGCGCGCGCGCATGACGCGCGCGACGT 705
Db |||||
QY 661 TGGGACCGCGCATGAGCTGCGCGCGCGCATGACGCGCGCGACGT 705

RESULT 15

US-09-285-306-10
; Sequence 10, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:

; APPLICANT: Drenkow, Jorg
; APPLICANT: Gengeras, Thomas
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 1.6e-152;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGGCGATCACACGCGACAGCCCTGATCAACATCCGTCAGTCTGGGCGG 60
Db |||||
QY 1 CCCAGGAGCTGGAGGCGATCACACGCGACAGCCCTGATCAACATCCGTCAGTCTGGGCGG 60
Db |||||
QY 61 CGATCAAGGAGTCTTTCGGGACACGACGCTGTCAGTTCATGACGAGAACAAACCGGC 120
Db |||||
QY 61 CGATCAAGGAGTCTTTCGGGACACGACGCTGTCAGTTCATGACGAGAACAAACCGGC 120
Db |||||
QY 121 TGTGGGGCTCACCCACAGCGCGCTGTCGGCGCTGGCGCGGCTGCTGTCCCGGG 180
Db |||||
QY 121 TGTGGGGCTTGACCCACAGCGCGCTGTCGGCGCTGGCGCGGCTGCTGTCCCGGG 180
Db |||||
QY 181 AGCGGGCGGGCTGGAGGTCCGCGACGTGACCCCGTCCACATACCGCGCGGATGTGCCGA 240
Db |||||
QY 181 AGCGGGCGGGCTGGAGGTCCGTCAGGTGACGTGACCCCGTCCACATACCGCGCGGATGTGCCGA 240
Db |||||
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTTCGCTGCTGATGCGGG 300
Db |||||
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTTCGCTGCTGATGCGGG 300
Db |||||
QY 301 TCAACCCGTTGGGTTCATCGAGAGCGGTACCGCAAGGTGGTGCACGCGGTGTCACCG 360
Db |||||
QY 301 TCAACCCGTTGGGTTCATCGAGAGCGGTACCGCAAGGTGGTGCACGCGGTGTCACCG 360
Db |||||
QY 361 ACGAGATCCACTACCTGACCGCGGACGAGGAGGACCGCACGTCGTTGGCGAGGCAACT 420
Db |||||
QY 361 ACGAGATCCACTACCTGACCGCGGACGAGGAGGACCGCACGTCGTTGGCGAGGCAACT 420
Db |||||
QY 421 CGCCGATCGACGACGAGGCGCGTTTCGGGAGCGCGGTGCTGTCGCGCGCAAGCGG 480
Db |||||
QY 421 CGCCGATCGACGACGAGGCGCGTTTCGGGAGCGCGGTGCTGTCGCGCGCAAGCGG 480
Db |||||
QY 481 GCGAGGTGAGTACGTGCGCCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGGCCAGA 540

Db 481 GCGAGGTGAGTACGTGCGCCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGGCCAGA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTTCTTCGAGCACGACGACCGCAACCGTGCCC 600
Db |||||
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTTCTTCGAGCACGACGACCGCAACCGTGCCC 600
Db |||||
QY 601 TGATGGGCGCCCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCGACGAGGCGCGCTGG 660
Db |||||
QY 601 TGATGGGCGCCCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCGACGAGGCGCGCTGG 660
Db |||||
QY 661 TGGGACCGCGCATGAGCTGCGCGCGCGCATGACGCGCGCGACGT 705
Db |||||
QY 661 TGGGACCGCGCATGAGCTGCGCGCGCGCATGACGCGCGCGACGT 705

Search completed: August 25, 2005, 11:35:34
Job time : 452.661 secs

This Page Blank (usps)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds
(without alignments)
11150.034 Million cell updates/sec

Title: US-09-285-306-7
Perfect score: 705
Sequence: 1 cccaggacgtgagcgatc.....ggcgatcgacggcgacgt 705

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents NA: *
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq: *
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq: *
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq: *
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq: *
5: /cgn2_6/ptodata/1/ina/PTUS_COMB.seq: *
6: /cgn2_6/ptodata/1/ina/backfiles1.seq: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	2	US-08-313-185-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	3	US-08-520-946-135
11	530.4	75.2	620	3	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	3	US-08-520-946-136
19	528.8	75.0	620	3	US-08-520-946-137
20	528.8	75.0	620	3	US-08-520-946-139
21	528.8	75.0	620	3	US-08-520-946-140
22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	411	58.3	5099	4	US-09-887-052-1

28	409.4	58.1	5099	4	US-09-887-052-3	Sequence 3, Appli
29	409.4	58.1	5099	4	US-09-887-052-5	Sequence 5, Appli
30	402	57.0	4227	4	US-09-902-540-8919	Sequence 8919, Ap
c 31	402	57.0	9367	4	US-09-902-540-951	Sequence 951, App
c 32	371.2	52.7	4074	4	US-09-252-991A-4737	Sequence 4737, Ap
33	371.2	52.7	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
34	337.2	47.8	4083	4	US-09-489-039A-22	Sequence 22, Appl
c 35	337.2	47.8	4206	4	US-09-489-039A-30	Sequence 30, Appl
36	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
37	293.4	41.6	432	3	US-09-082-614A-59	Sequence 59, Appl
38	286.2	40.6	324	3	US-08-750-088A-36	Sequence 36, Appl
39	286.2	40.6	324	4	US-09-722-319-36	Sequence 36, Appl
40	265.2	37.6	2964	4	US-09-540-236-1097	Sequence 1097, Ap
41	265.2	37.6	3167	4	US-09-543-681A-3177	Sequence 3177, Ap
42	265.2	37.6	31063	4	US-09-596-002-20	Sequence 20, Appl
43	255.6	36.3	319	3	US-08-750-088A-35	Sequence 35, Appl
44	255.6	36.3	319	4	US-09-722-319-35	Sequence 35, Appl
c 45	249.8	35.4	11935	4	US-09-634-238-401	Sequence 401, App

ALIGNMENTS

RESULT 1

US-08-797-812-24
; Sequence 24, Application US/08797812
; Patent No. 6228575
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas A.
; APPLICANT: Mack, David
; APPLICANT: Chee, Mark S.
; APPLICANT: Berno, Anthony J.
; APPLICANT: Stryer, Lubert
; APPLICANT: Ghandour, Ghassan
; APPLICANT: Wang, Ching
; TITLE OF INVENTION: Chip-Based Species Identification and
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/797,812
; FILING DATE: 07-FEB-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/017,765
; FILING DATE: 15-MAY-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/629,031
; FILING DATE: 08-APR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/012,631
; FILING DATE: 01-MAR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/011,339
; FILING DATE: 08-FEB-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Fitts, Renee A.
; REGISTRATION NUMBER: 35,136
; REFERENCE/DOCKET NUMBER: 16528X-018550
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-326-2400
; TELEFAX: 415-326-2422


```
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; TYPE: DNA
; LENGTH: 4411529
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.4%; Pred. No. 1.2e-116;
Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
DB 761003 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 761062

QY 61 CGATCAAGAGTCTTTCGGACACGACGACGTGCCAGTTCATGACGACGACCAACCCCGC 120
DB 761063 CGATCAAGAGTCTTTCGGACACGACGACGTGCCAGTTCATGACGACGACCAACCCCGC 761122

QY 121 TGTGGGGCTCACCCACAGCGCGCTGTGCGCGCTGGCGCGTGGTGTCTGTCCCGG 180
DB 761123 TGTGGGGTGTGACCCACAGCGCGGACTGTGCGCGCTGGCGCGTGGTGTCTGTCCAGTG 761182

QY 181 AGCGGGCCGGGTGGAGGTCCGCGAGTCCACCGCTCCCACTACGCGCGGATGTGCCGA 240
DB 761183 AGCGTCCGGGTGGAGGTCCGCGAGTCCACCGCTCCCACTACGCGCGGATGTGCCGA 761242

QY 241 TCGAGACCCCGAGGTTCCACATCGTCTGATGGCTCGCTGTGCGGTATGCGCGG 300
DB 761243 TCGAAACCCCTGAGGGGCGCAACATCGTCTGATCGCTCGCTGTGCGGTATGCGCGG 761302

QY 301 TCAACCCGTTCGGTTTCATCGAGAGCGCTGACGAAAGTGTGACGCGCGTGTACCG 360
DB 761303 TCAACCCGTTCGGTTTCATCGAAACGCGTACCGAAAGTGTGACGCGCGTGTAGCG 761362

QY 361 ACAGATCCACTACTGACCGCGAGGAGGACCGCACCTGTGTGGCGAGGCAACT 420
DB 761363 ACAGATCGTGTACTGACCGCGAGGAGGACCGCACCTGTGTGGCGAGGCAACT 761422

QY 421 CGCGATTCAGACAAAGGCGCGTTCGCGAGGCGCGGTGTGTCGCGCGCAAGGCGG 480
DB 761423 CGCGATTCAGACAAAGGCGCGTTCGTCGAGCGCGCGTGTGTCGCGCGCAAGGCGG 761482

QY 481 GCGAGTTCAGTACGTGCGCTCGTCCGAGTGGATCTACATGACGTGTGCGCGCGCAGA 540
DB 761483 GCGAGTTCAGTACGTGCGCTCGTCCGAGTGGATCTACATGACGTGTGCGCGCGCAGA 761542

QY 541 TGTGTGCGTGGCGCACCGCGATGATCCCGTTCTCTGAGCACGACGACGCAACCGTGCGCC 600
DB 761543 TGTGTGCGTGGCGCACCGCGATGATTCCTTCTGAGCACGACGACGCAACCGTGCGCC 761602

QY 601 TGATGGGCGCAACATGACAGCGCCAGCGGTTCCGCTGTGTCGACGAGGCGCGCTGG 660
DB 761603 TCATGGGCGCAACATGACAGCGCCAGCGGTTCCGCTGTGTCGACGAGGCGCGCTGG 761662

QY 661 TGGGACCGGATGAGCTGCGCGCGCGATCGACGCGG 699
DB 761663 TGGGACCGGATGAGCTGCGCGCGCGATCGACGCGG 761701
```

RESULT 4

US-08-313-185-57

```
; Sequence 57, Application US/08311185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Teienti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-313-185-57
```

```
Query Match      79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.1e-107;
Matches 511; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
DB 1124 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAATATCCGTCCGTGGTGGCGG 1183

QY 61 CGATCAAGAGTCTTTCGGACACGACGACGTGCCAGTTCATGACGACGACCAACCCCGC 120
DB 1184 CTATCAAGAAATCTTTCGGACACGACGACGTGTGCGAGTTCATGATCAGAACCAACCTTC 1243

QY 121 TGTGGGGCTCACCCACAGCGCGCTGTGCGCGCTGGCGCGTGGTGTCTGTCCCGG 180
DB 1244 TGTGGGGCTGACCCACAGCGCGCTGTGCGCGCTGGCGCGTGGTGTCTGTCCCGG 1303

QY 181 AGCGGGCCGGCTGGAGTTCGCGACGTCGACCCGCTCCACTACGCGCGGATGTGCCGA 240
DB 1304 AGCGTCCGGCTAGAGGTCCGTGACGTGACCCCTTCGCACTACGCGCGGATGTGCCGA 1363

QY 241 TCGAGACCCCGAGGTTCCCAACATCGTCTGATCGGTTCGCTGTGCGGTATGCGCGG 300
DB 1364 TCGAGACTCCCGAGGCGCGGACCAATAGGTCTGATCGGTTCATGTCGGTGTACGCGCGG 1423

QY 301 TCAACCCGTTCGGTTTCATCGAGAGCGCGTACCGCAAGTGTGACGCGGTGTGTCAGCG 360
DB 1424 TCAACCCGTTCGGTTTCATCGAAACACCGCTACCGCAAGTGTGACGCGGTGTGTCAGCG 1483
```

```
QY 361 ACGAGATCCACTACCTGACCCGCGACGAGGAGACCGCCACGTTGGTGGCGAGGCCAACT 420
Db 1484 ACGAGATCGAATACCTGACCCGCTGACGAGGAAGACCGCCATGTCGTGGCGAGGCCAACT 1543
QY 421 CGCCCATGACGACAAAGGCGCGGTTCGCGAGGAGCCGGGTGCTGTCCGCGCGCAAGGCGG 480
Db 1544 CGCCCATGACGAGGCGCGCGGTTCCTCGAGCGCGCGGTTCGTGGGTGGCGCGCAAGGCGG 1603
QY 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGACTACATGACGCTGTCGCGCGGCCAGA 540
Db 1604 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGACTACATGACGCTGTCGCGCGGCCAGA 1663
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCCAACCGTGCCC 600
Db 1664 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCCAACCGTGCCC 1723
QY 601 TGATGGGCGCCAAATGACGAGCGCCAGGCGGTTCGCGTGGTGGCGAGAGGCGCGCGTGG 660
Db 1724 TGATGGGCGCTAACATGACGAGCGCCAAAGCGGTTCGCGTGGTGGCGAGCGAACGACCGTTGG 1783
QY 661 TGGGCGACCGCATGAGCTGCGCGCGCGATCGACGCGG 699
Db 1784 TGGGTACCGGTATGAGTTGCGCGCGCCATCGACGCTG 1822
```

```
RESULT 5
US-09-082-614A-57
; Sequence 57, Application US/09082614A
; Patent No. 6124098
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSER: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/082,614A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/313,185
; FILING DATE: 12-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
```

```
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-09-082-614A-57
Query Match 79.2%; Score 558.2; DB 3; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.1e-107;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;
QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTGATCAACATCCGTCCAGTCCGTGGCGG 60
Db 1124 CCCAGGACGTGGAGGCGATCACACCGCAGCAGCGTGTGATCAATATCCGTCCGTGGTGGCGG 1183
QY 61 CGATCAAGGAGTTCTTCGGCACCAAGCGAGTGTCCCAGTTCATCGAATCATGGAACAACCCGC 120
Db 1184 CTATCAAGGAATTTCTTCGGCACCAAGCGAGTGTCCGAGTTCATGATGATGATGATGATGATGAT 1243
QY 121 TGTGGGGCTCACCAACAGCGCGCTGTTCGGCGCTGGGCGCGGTGCTGTTCGCCGG 180
Db 1244 TGTGGGGCTCACCAACAGCGCGCTGTTCGGCGCTGGGCGCGGTGCTGTTCGCCGGT 1303
QY 181 AGCGGGCGGGCTGGAGGTCCGCGACGTGACACCGTCCCACTACGCGCGGATGTGCCCGA 240
Db 1304 AGCGTGGCGGCTAGAGTCCGTGACGTGACCCCTTCGACTACGCGCGATGTGCCCGA 1363
QY 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTTCGCTGTGATCGCGGG 300
Db 1364 TCGAGACTCCGAGGCGGCCGAAATAGTCTGTGATCGGTTCAATTGTCGCTGTACGCGGG 1423
QY 301 TCAACCGGTTCCGGTTTCATCGAGACGCGGTACCCGAGGTGCTCGAGGCGGTGCTCACCG 360
Db 1424 TCAACCGGTTCCGGTTTCATCGAGAACACCGTACCCGAAAGTGTGACGCGGTGCTGACCG 1483
QY 361 ACAGATCCACTACCTGACCCCGCAGCAGGAGGAGCCGACGTGTGTGGCGCAGGCCAACT 420
Db 1484 ACAGATCGAATACCTGACCCGCTGACGAGGAGACGCCCATGTCTGTGGCGCAGGCCAACT 1543
QY 421 CGCCGATCGACGACAAAGGCGCGGTTCGCGAGGCGCCGGGTGCTGTTCGCGCGCAAGGCGG 480
Db 1544 CGCCGATCGACGAGGCGCGCGGTTCCTCGAGCGCGCGGTTCGTGGGTGCGCGCAAGGCGG 1603
QY 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGAATACATGAGTGTCTCGCCACGCGCCAGA 540
Db 1604 GCGAGGTGAGTACGTGCGCTCGTCCGAGGTGGAATACATGAGTGTCTCGCCACGCGCCAGA 1663
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCCAACCGTGCCC 600
Db 1664 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCCAACCGTGCCC 1723
QY 601 TGATGGGCGCCAAATGACGAGCGCCAGCGGTTCGCTGTGGTGGCGAGGCGCGCGTGG 660
Db 1724 TGATGGGCGCTAACATGACGAGCGCCAAAGCGGTTCGCTGTGGTGGCGAGGCGCGCGTGG 1783
QY 661 TGGGCGACCGCATGAGCTGCGCGCGCGATCGACGCGG 699
Db 1784 TGGGTACCGGTATGAGTTGCGCGCGCCATCGACGCTG 1822
RESULT 6
US-08-250-030-1
; Sequence 1, Application US/08250030
; Patent No. 5643723
; GENERAL INFORMATION:
; APPLICANT: Persing, David H.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in
; TITLE OF INVENTION: Clinical Specimens
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
```

```

; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/250,030
; FILING DATE: 26-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Muetting, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 150.105US1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-250-030-1

Query Match 76.7%; Score 540.4; DB 1; Length 970;
Best Local Similarity 91.1%; Pred. No. 5e-104;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACGCGACACCTGATCAACATCCGTCAGTCGTCGGCG 60
Db 341 CCCAGAGCTGGAGGCGATCACACGCGACACCTGATCAACATCCGTCAGTCGTCGGCG 400

QY 61 CGATCAAGAGTCTTTCGGCACCAGCAGCTGTCCAGTTTCATGGACAGAACACCCGC 120
Db 401 CGATCAAGAGTCTTTCGGCACCAGCAGCTGTCCAGTTTCATGGACAGAACACCCGC 460

QY 121 TGTGGGGCTCACCAAGCGCCCTGTGCGGCTGGGCGGCTGTGTCTGTCCCGG 180
Db 461 TGTGGGGTTGACCCACAAAGCGCGACTGTGCGGCTGGGCGGCTGTGTCTGTCCCGG 520

QY 181 AGCGGGCGGCTGGAGTCCGCGAGTCACCGCTCCACTACCGCGGATGTCGCCGA 240
Db 521 AGCGTCCGGCTGGAGGAGCGGACGTCACCGCTCCACTACCGCGGATGTCGCCGA 580

QY 241 TCGAGACCCCGAGGCTCCAAACATCGGCTCGCTGTGCGGTATGTCGCGG 300
Db 581 TCGAACCCTGAGGGGCCAACATCGTCTGATCGGCTCGCTGTGTCGTCGCGG 640

QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGAAGTGTGTCGACGCGTGTACCG 360
Db 641 TCAACCCGTTCCGGTTTCATCGAAGCGCGTACCGAAGTGTGTCGACGCGTGTACCG 700

QY 361 ACGAGATCCACTACCTACCGCGGAGGAGGACCGCACGTCGTGTGGCGAGGCAACT 420
Db 701 ACGAGATCGTGTACCTACCGCGGAGGAGGACCGCACGTCGTGTGGCGAGGCAACT 760

QY 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGCTGTGTCGCGCGCAAGGCGG 480
Db 761 CGCCGATCGATCGGAGCGGTCGCTGTGTCGACCGCGGCTGTGTCGCGCGCAAGGCGG 820

QY 481 GCGAGTTCGAGTACGTGCGCTCGTCGAGGTGGAATACATGACGCTGTGCGCGCGCAGA 540
Db 821 GCGAGTTCGAGTACGTGCGCTCGTCGAGGTGGAATACATGACGCTGTGCGCGCGCAGA 880

QY 541 TGGTGTGCGTCCACCGGATGATCCGTTCTCGAGCAGCAGACCGCAACCGTGGCC 600
Db 881 TGGTGTGCGTCCACCGGATGATCCGTTCTCGAGCAGCAGACCGCAACCGTGGCC 940

QY 601 TGAATGGGCGCAACATGACAGCGCCAGGCGG 630
Db 941 TGAATGGGCGCAACATGACAGCGCCAGGCGG 970
```

```

RESULT 7
PCT-US95-06790-1
; Sequence 1, Application PC/TUS9506790
; GENERAL INFORMATION:
; APPLICANT: Mayo Foundation for Medical Education and Research
; APPLICANT: and Hoffmann-La Roche Inc.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woesner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/06790
; FILING DATE: 26-MAY-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Raasch, Kevin W.
; REGISTRATION NUMBER: 35,651
; REFERENCE/DOCKET NUMBER: 150.105W01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
PCT-US95-06790-1
```

```

Query Match 76.7%; Score 540.4; DB 5; Length 970;
Best Local Similarity 91.1%; Pred. No. 5e-104;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACGCGACACCTGATCAACATCCGTCAGTCGTCGGCG 60
Db 341 CCCAGAGCTGGAGGCGATCACACGCGACACCTGATCAACATCCGTCAGTCGTCGGCG 400

QY 61 CGATCAAGAGTCTTTCGGCACCAGCAGCTGTCCAGTTTCATGGACAGAACACCCGC 120
Db 401 CGATCAAGAGTCTTTCGGCACCAGCAGCTGTCCAGTTTCATGGACAGAACACCCGC 460

QY 121 TGTGGGGCTCACCAAGCGCCCTGTGCGGCTGGGCGGCTGTGTCTGTCCCGG 180
Db 461 TGTGGGGTTGACCCACAAAGCGCGACTGTGCGGCTGGGCGGCTGTGTCTGTCCCGG 520

QY 181 AGCGGGCGGCTGGAGTCCGCGAGTCACCGCTCCACTACCGCGGATGTCGCCGA 240
Db 521 AGCGTCCGGCTGGAGGAGCGGACGTCACCGCTCCACTACCGCGGATGTCGCCGA 580

QY 241 TCGAGACCCCGAGGCTCCAAACATCGGCTCGCTGTGCGGTATGTCGCGG 300
Db 581 TCGAACCCTGAGGGGCCAACATCGTCTGATCGGCTCGCTGTGTCGTCGCGG 640

QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGAAGTGTGTCGACGCGTGTACCG 360
Db 641 TCAACCCGTTCCGGTTTCATCGAAGCGCGTACCGAAGTGTGTCGACGCGTGTACCG 700

QY 361 ACGAGATCCACTACCTACCGCGGAGGAGGACCGCACGTCGTGTGGCGAGGCAACT 420
```

Db 701 ACGAGATCGTGTACCTGACCGCCGACGAGGAGGACCGCCACGTTGTCGACACAGGCGCAATT 760
Qy 421 CCGCATGACACAAAGGCGCGGTTTCGCGAGGCGCGGTCGTCTCGCGCGCAAGGCGG 480
Db 761 CCGCATGATCGGACGGTCGCTTCGTGAGCCGCGGTGTCGCGCGCAAGGCGG 820
Qy 481 GCGAGGTGAGTACGTGCTTCGTCGAGGTGACACTACATGACACGTGTCGCGCGCCAGA 540
Db 821 GCGAGGTGAGTACGTGCTTCGTCGAGGTGACACTACATGACACGTGTCGCGCGCCAGA 880
Qy 541 TGGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGACACGACGCGCAACGTCGCC 600
Db 881 TGGTGTGCGTGGCCACCGCGATGATTCCTTCGAGACACGACGCGCAACCGTCGCC 940
Qy 601 TGATGGGCGCCAAATGACGAGCGCCAGGCGG 630
Db 941 TCATGGGGGCAACATGACGCCAGGCGG 970

RESULT 8

US-08-757-653-135
; Sequence 135, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-135

Query Match 75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;
Qy 36 ATCAACATCCGTCACGTCGTCGCGGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCC 95
Db 1 ATCAACATCCGCGCGGTGTCGCGCGATCAAGGAGTTCTTCGGCACCAGCCAGCTGAGC 60
Qy 96 CAGTTTCATGGACACAGAACACCGCTGTCGGGCTCACCCACAGCGCGCTGTGCGGG 155
Db 61 CAATTTCATGGACACAGAACACCGCTGTGCGGGTTGACCCCAAGCGCGACTGTGCGGG 120

Qy 156 CTGGGCGCGGTGCTCTGTCTCCGGGAGCGGGCCCGGCTGGAGGTCCGCGACGTGCACCCG 215
Db 121 CTGGGCGCGGTGCTCTGTCTCCGGGAGCGGGCCCGGCTGGAGGTCCGCGACGTGCACCCG 180
Qy 216 TCCCACTACGCGCGGATGTGCCCGATCGAGACCCCGGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
Qy 276 GGCTCGCTGTGCGGTGATCGCGGGTCAACCCGTTTCGGTTTCATCGAGAGCCGTCACCGC 335
Db 241 GGCTCGCTGTGCGGTGATCGCGGGTCAACCCGTTTCGGTTTCATCGAAACGCCGTCACCGC 300
Qy 336 AAGGTGTCGACGCGGTGTCACCGACGAGATCCACTACCTGACCCGCGCGAGGAGGAC 395
Db 301 AAGGTGTCGACGCGGTGTCGACGAGATCGGTACCTGACCCGCGCGAGGAGGAC 360
Qy 396 CGCCACGTGTGCGCGAGGCGCAACTCGCCGATCGACACAAAGGGCCCGGTCGCGGAGGCC 455
Db 361 CGCCACGTGTGCGCGAGGCGCAATTCGCCGATCGACGCGTCGTTCTGTCGAGCGC 420
Qy 456 CGGTGTGTCGCGCGCAAGGCGGCGAGTCCGAGTACGTGCGCTCGTCGAGGTGAC 515
Db 421 CGGTGTGTCGCGCGCAAGGCGGCGAGTCCGAGTACGTGCGCTCGTCGAGGTGAC 480
Qy 516 TACATGACGTGTGCGCGCGCGACATGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 575
Db 481 TACATGACGTGTGCGCGCGCGACATGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 540
Qy 576 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 635
Db 541 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 600
Qy 636 CTGGTGGCGAGCGAGGCGCC 655
Db 601 CTGGTGGCGAGCGAGGCGCC 620

RESULT 9

US-08-757-653-138/c
; Sequence 138, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:

```
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match          75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGTCGGCGGATCAAGAGTCTTCGGCACCAGCAGCTGTCC 95
DB 620 ATCAACATCCGTCGTCGGCGGATCAAGAGTCTTCGGCACCAGCAGCTGTCC 561

QY 96 CAGTTCATGACACAGAACACCGCTGTCTGGGCTCACCAACAAGCGCGCTGTCTGGCG 155
DB 560 CAATTTCATGACACAGAACACCGCTGTCTGGGCTTCAGCCACAAGCGCGCTGTCTGGCG 501

QY 156 CTGGGCGCGGCTGTCTGTCCGGAGCGCGCGCTGGAGTCCGGACGTGCACCCG 215
DB 500 CTGGGCGCGGCTGTCTGTCACTGAGCGTGCCTGGCTGGAGTCCGGACGTGCACCCG 441

QY 216 TCCCACTACGCGCGGATGTCGGATCGAGACCCCGGAGGTCCCAACATCGGTCTGATC 275
DB 440 TCGCACTACGCGCGGATGTCGGATCGAGAACCCCTGAGGGGCGCCAAACATCGGTCTGATC 381

QY 276 GGTCTGCTGTCTGCTGTATCGCGGGTCAACCCGCTTCGGGTTCATCGAGACGCGTACC 335
DB 380 GGTCTGCTGTCTGCTGTATCGCGGGTCAACCCGCTTCGGGTTCATCGAGACGCGTACC 321

QY 336 AAGTGGTTCAGCGCGTGTCTACCGACGAGATCCACTACTGACCCCGCAGCAGGAGGAC 395
DB 320 AAGTGGTTCAGCGCGTGTCTAGCGACGAGATCGTACTGACCCCGCAGCAGGAGGAC 261

QY 396 CGCCAGTGTGGCGCAGCGCACTCGCGATCGACGACGAGCGCGGTTCGGGAGGCC 455
DB 260 CGCCAGTGTGGCGCAGCGCAATTCGCGATCGATCGCGAGTCTGCTTCGTCGAGCGG 201

QY 456 CGGCTGCTGTCTGCTCGCGCAGCGCGGAGTCTGAGTCTGCTCTGTCGAGGTGAC 515
DB 200 CGGCTGCTGTCTGCTCGCGCAGCGCGGAGTCTGAGTCTGCTCTGTCGAGGTGAC 141

QY 516 TACATGAGATGTCTGCGCGCGCAGATGTGTGCTGGCCACCGCGATGATCCCGTTCCTC 575
DB 140 TACATGAGATGTCTGCGCGCGCAGATGTGTGCTGGCCACCGCGATGATTCCTTCCTG 81

QY 576 GAGCAGCAGCAGCGCAACCGTCCCTGATGGGCGCAACATGACGCGCAGCGGTTCCG 635
DB 80 GAGCAGCAGCAGCGCAACCGTCCCTGATGGGCGCAACATGACGCGCAGCGGTTCCG 21

QY 636 CTGGTCCGACGAGGCGCC 655
DB 20 CTGGTCCGACGAGGCGCCC 1
```

RESULT 10

```
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
```

```
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

Query Match          75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGTCGGCGGATCAAGAGTCTTCGGCACCAGCAGCTGTCC 95
DB 1 ATCAACATCCGTCGTCGGCGGATCGCGCGATCAAGAGTCTTCGGCACCAGCAGCTGAC 60

QY 96 CAGTTCATGACACAGAACACCGCTGTCTGGGCTCACCAACAAGCGCGCTGTCTGGCG 155
DB 61 CAATTTCATGACACAGAACACCGCTGTCTGGGCTTCAGCCACAAGCGCGCTGTCTGGCG 120

QY 156 CTGGGCGCGGCTGTCTGTCCGGAGCGCGCGCTGGAGTCCGGACGTGCACCCG 215
DB 121 CTGGGCGCGGCTGTCTGTCACTGAGCGTGCCTGGCTGGAGTCCGGACGTGCACCCG 180

QY 216 TCCCACTACGCGCGGATGTCGGATCGAGACCCCGGAGGTCCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTCGGATCGAGAACCCCTGAGGGGCGCCAAACATCGGTCTGATC 240

QY 276 GGTCTGCTGTCTGCTGTATCGCGGGTCAACCCGCTTCGGGTTCATCGAGACGCGTACC 335
DB 241 GGTCTGCTGTCTGCTGTATCGCGGGTCAACCCGCTTCGGGTTCATCGAGACGCGTACC 300

QY 336 AAGTGGTTCAGCGCGTGTCTACCGACGAGATCCACTACTGACCCCGCAGCAGGAGGAC 395
DB 301 AAGTGGTTCAGCGCGTGTCTAGCGACGAGATCGTACTGACCCCGCAGCAGGAGGAC 360

QY 396 CGCCAGTGTGGCGCAGCGCAACTCGCGCGATCGACGACAGGGCGCGGTTCGGGAGGCC 455
DB 361 CGCCAGTGTGGCGCAGCGCAATTCGCGCGATCGATGCGGACGCTGCTTCGTCGAGCGG 420

QY 456 CGGCTGCTGTCTGCTCGCGCAGCGCGGAGTCTGAGTCTGCTCTGTCGCGAGGTGAC 515
DB 421 CGGCTGCTGTCTGCTCGCGCAGCGCGGAGTCTGAGTCTGCTCTGCTCTGTCGAGGTGAC 480

QY 516 TACATGAGATGTCTGCGCGCGCAGATGTTGTGGTGGCCACCGCGATGATCCCGTTCCTC 575
DB 481 TACATGAGATGTCTGCGCGCGCAGATGTTGTGGTGGCCACCGCGATGATTCCTTCCTG 540

QY 576 GAGCAGCAGCAGCGCAACCGTCCCTGATGGGCGCAACATGACGCGCAGCGGTTCCG 635
DB 541 GAGCAGCAGCAGCGCAACCGTCCCTCATGGGGGCAACATGACGCGCAGCGGTTCCG 600

QY 636 CTGGTCCGACGAGGCGCC 655
DB 20 CTGGTCCGACGAGGCGCCC 1
```

```
Db 601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 11
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-138

Query Match 75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCAGTGTGCGCGCGATCAAGGAGTTCTTCGGCACCAGCGAGCTGTCC 95
Db 620 ATCAACATCCGCGCGTGTGCGCGGATCAAGGAGTTCTTCGGCACCAGCGAGCTGAGC 561

Qy 96 CAGTTTCATGGACCAAGAACCCGCTGTGCGGGCTCACCCACAAGCGCGCTGTGCGCG 155
Db 560 CAATTTCATGGACCAAGAACCCGCTGTGCGGGTTGACCCACAAGCGCGAGTGTGCGCG 501

Qy 156 CTGGGCCCCGGGTGTCTGTCTCCCGGAGCGCGCGCGGTGGAGTCCGCGAGTGCACCCG 215
Db 500 CTGGGCCCCGGGTGTCTGTCTACGTGAGCGTGTGCGGGTGGAGTCCGCGAGTGCACCCG 441

Qy 216 TCCCACTACGGCGCGATGTGCCGATCGAGACCCGAGGGTCCCAACATCGTCTGATC 275
Db 440 TCGCACTACGGCGCGATGTGCCGATCGAACCCTGAGGGGCCCAACATCGTCTGATC 381

Qy 276 GCGTCGCTGTGGTGTATGCGCGGTCAACCCGTTTCGGGTTTCATCGAGACCGCGTACCGC 335
Db 380 GCGTCGCTGTGGTGTATGCGCGGGTCAACCCGTTTCGGGTTTCATCGAAGCGCGTACCGC 321

Qy 336 AGGTGGTTCGAGGGCGGTGTACCGACGAGATCCACTACCTGACCGCGCGAGGAGGAC 395
Db 320 AAGGTGGTTCGAGGGCGGTGTAGCGACGAGATCGTGTACCTGACCGCGCGAGGAGGAC 261

Qy 396 GCCACGTTGTTGGCGCAGGCCAACTCGCCGATCGACGACAGGGCCCGTTTCGCGAGGCC 455
Db 260 GCCACGTTGTTGGCGCAGGCCAACTCGCCGATCGATCGGACGCTCGCTTCGTGAGCGC 201

Qy 456 CGGTGTGTTGTTCCGCGCAAGCGCGGCGAGGTCCAGTACGTGTCCTCGTCGAGGTGAC 515
Db 200 CGGTGTGTTGTTCCGCGCAAGCGCGGCGAGGTACGTGTCCTCGTCGAGGTGAC 141

Qy 516 TACATGGACGTTGTCGCGCGCCAGATGGTGTGCGTGCCACCGCGATGATCCCGTTCCTC 575
Db 140 TACATGGACGTTGTCGCGCGCCAGATGGTGTGCGTGCCACCGCGATGATTCCTTCCTG 81

Qy 576 GAGCACGACGACGCAACCGTGCCCTGATGGCGCCCAACATGACGCGCCAGCGGTTCCG 635
Db 80 GAGCACGACGACGCAACCGTGCCCTCATGGGGGCAACATGACGCGCCAGCGGTTCCG 21

Qy 636 CTGTGCGCAGCGAGGCGCC 655
Db 20 CTGTGCGCAGCGAGGCGCC 1

RESULT 12
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCAGTGTGCGCGCGATCAAGGAGTTCTTCGGCACCAGCGAGCTGTCC 95
Db 1 ATCAACATCCGCGCGTGTGCGCGGATCAAGGAGTTCTTCGGCACCAGCGAGCTGAGC 60
```



```

QY 96 CAGTTTCATGACACAGAAACACCGCTGTTCGGGGCTCACCCACAAAGCGCCCTGTTCGGCG 155
DB 61 CAATTTCATGACACAGAAACACCGCTGTTCGGGGTTGACCCACAAAGCGCCGACTGTTCGGCG 120
QY 156 CTGGGCGCCGGTGTCTGTTCGGGAGAGCGCGGCTGAGGTCCGCGACGTGACACCG 215
DB 121 CTGGGCGCCGGTGTCTGTTCGAGCGTTCGGGCTGAGGTCCGCGACGTGACACCG 180
QY 216 TCCCACTACGCGCGGATGTCCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGTATC 275
DB 181 TCGCACTACGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGTATC 240
QY 276 GGCCTGCTGTTCGGTGTATCGCGGGTCAACCGGTTTCGGGTTTCATCGAGACGCGTACCGC 335
DB 241 GGCCTGCTGTTCGGTGTATCGCGGGTCAACCGGTTTCGGGTTTCATCGAAACGCGCTACCGC 300
QY 336 AAGGTGGTTCAGCGCGGTGTTCACCGACGAGATCCACTGTACCGCGCCGACGAGGAGGAC 395
DB 301 AAGGTGGTTCAGCGCGGTGTTCAGCGAGATCGGTGTACCTGACCGCGCCGACGAGGAGGAC 360
QY 396 CGCCACGTGGTGGCGAGGCCAACTCGCCGATCGACGACAAAGGCGCGGTTCGCGGAGGCC 455
DB 361 CGCCACGTGGTGGCGAGGCCAACTCGCCGATCGATGCGGACGCTTCGTTCGAGCGCG 420
QY 456 CGGGTGTCTGGTTCGGCGGAGGCGGCGAGGTTCGAGTACGTGCTTCGTTCGAGGTGAC 515
DB 421 CGGGTGTCTGGTTCGGCGGAGGCGGCGAGGTTCGAGTACGTGCTTCGTTCGAGGTGAC 480
QY 516 TACATGGAGCTGTTCGGCGGCGAGATGTGTTCGGTGGCCACCGCATGATCCCTTCCTC 575
DB 481 TACATGGAGCTGTTCGGCGGCGAGATGTGTTCGGTGGCCACCGCATGATCCCTTCCTC 540
QY 576 GAGCAGCAGCAGCCAACTGCTGATGGGCGCAACATGACGCGCGAGCGGTTCG 635
DB 541 GAGCAGCAGCAGCCAACTGCTGATGGGCGCAACATGACGCGCGAGCGGTTCG 600
QY 636 CTGGTGGCAGGAGGCGCC 655
DB 601 CTGGTGGCAGGAGGCGCC 620

```

```

RESULT 13
US-09-655-378A-138/c
; Sequence 138, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROM, MARY ANN D.
; OLIVE, DAVID M.
; LYAMICHEV, VICTOR I.

```

TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF PATHOGENS

NUMBER OF SEQUENCES: 165

CORRESPONDENCE ADDRESS:

ADDRESSER: MEDLEN & CARROLL

STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/655,378A

FILING DATE: 05-Sep-2000

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: CARROLL, PETER G.

REGISTRATION NUMBER: 32,837

REFERENCE/DOCKET NUMBER: FORS-01756

```

; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 138:
US-09-655-378A-138

```

```

Query Match 75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

```

```

QY 36 ATCAACATCCCGCGGTGTTCGGCGCGATCAAGAGATTTCTTCGGCACACGACGCTGTCC 95
DB 620 ATCAACATCCCGCGGTGTTCGGCGCGATCAAGAGATTTCTTCGGCACACGACGCTGTCC 561
QY 96 CAGTTTCATGACACAGAAACACCGCTGTTCGGGGTTCACCCACAAAGCGCGCTGTTCGGCG 155
DB 560 CAAATTCATGACACAGAAACACCGCTGTTCGGGGTTCACCCACAAAGCGCGCTGTTCGGCG 501
QY 156 CTGGGCGCCGGTGTCTGTTCGGGAGGCGGCGGCTGAGGTTCGGGACGTGACACCG 215
DB 500 CTGGGCGCCGGTGTCTGTTCAGTGTGAGCGTTCGGGGTTCGGGACGTGACACCG 441
QY 216 TCCCACTACGCGCGGATGTCCCGATCGAGACCCCGAGGGTTCCAAACATCGGTCTGTATC 275
DB 440 TCGCACTACGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGTATC 381
QY 276 GGCCTGCTGTTCGGTGTATGCGCGGTCAACCGGTTTCGGGTTTCATCGAGACGCGTACCGC 335
DB 380 GGCCTGCTGTTCGGTGTATGCGCGGTCAACCGGTTTCGGGTTTCATCGAAACGCGTACCGC 321
QY 336 AAGGTGGTTCAGCGCGGTGTTCACCGACGAGATCCACTGTACCGCGCGACGAGGAGGAC 395
DB 320 AAGGTGGTTCAGCGCGGTGTTCAGCGACGAGATCGGTGTACCTGACCGCGCGACGAGGAGGAC 261
QY 396 CGCCACGTGGTGGCGAGGCCAACTCGCCGATCGACGACAAAGGCGCGGTTCGCGGAGGCC 455
DB 260 CGCCACGTGGTGGCGAGGCCAACTCGCCGATCGATGCGGACGCTTCGTTCGAGCGCG 201
QY 456 CGGGTGTCTGGTTCGGCGGAGGCGGCGAGGTTCGAGTACGTGCTTCGTTCGAGGTGAC 515
DB 200 CGGGTGTCTGGTTCGGCGGAGGCGGCGAGGTTCGAGTACGTGCTTCGTTCGAGGTGAC 141
QY 516 TACATGGAGCTGTTCGGCGGCGAGATGTGTTCGGTGGCCACCGCATGATCCCTTCCTC 575
DB 140 TACATGGAGCTGTTCGGCGGCGAGATGTGTTCGGTGGCCACCGCATGATCCCTTCCTC 81
QY 576 GAGCAGCAGCAGCCAACTGCTGATGGGCGCAACATGACGCGCGAGCGGTTCG 635
DB 80 GAGCAGCAGCAGCCAACTGCTGATGGGCGCAACATGACGCGCGAGCGGTTCG 61
QY 636 CTGGTGGCAGGAGGCGCC 655
DB 20 CTGGTGGCAGGAGGCGCC 1

```

```

RESULT 14
US-08-757-653-136
; Sequence 136, Application US/08757653
; Patent No. 5843659
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; THERMOSTABLE FEN-1 ENDONUCLEASES
; NUMBER OF SEQUENCES: 190

```

```
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Medlen & Carroll, LLP
/ STREET: 220 Montgomery Street, Suite 2200
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: United States Of America
/ ZIP: 94104
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/757,653
/ FILING DATE:
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Ingolia, Diane E.
/ REGISTRATION NUMBER: 40,027
/ REFERENCE/DOCKET NUMBER: FORS-02565
/ TELEPHONE: (415) 705-8410
/ TELEFAX: (415) 397-8338
/ INFORMATION FOR SEQ ID NO: 136:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 620 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: double
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA (genomic)
/ US-08-757-653-136

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 1.3e-101;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGTGCGCGCATCAAGAGAGTTCTTCGGCACCAAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGGTGTGTCGCCGATCAAGAGAGTTCTTCGGCACCAAGCCAGCTGTGAGC 60
QY 96 CAGTTTCATGGACACAGAACACCCGTCGTGCGGGCTCACCCACAAGCGCGCGCTGTGCGCG 155
DB 61 CAATTTCATGGACACAGAACACCCGTCGTGCGGGTTGACCCACAAGCGCGCGCTGTGCGCG 120
QY 156 CTGGCGCGCGGTGTGTCGCCGAGCGCGGGCTTGGAGGTTCCGGAGGTTCCGGAGCTGCACCG 215
DB 121 CTGGGGCCCGCGGTCTGTACAGTGAGCGTGCCGGGCTTGGAGGTTCCGGAGCTGCACCG 180
QY 216 TCCCACTACGCGCGGATGTGCCCGATCGAGACCCCGGAGGGTCCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGCTGTGCGGTGTATGCGCGGGTCAACCCGTTCCGGTTTCATCGAGCGCGGTACCGC 335

CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Medlen & Carroll, LLP
/ STREET: 220 Montgomery Street, Suite 2200
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: United States Of America
/ ZIP: 94104
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/757,653
/ FILING DATE:
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Ingolia, Diane E.
/ REGISTRATION NUMBER: 40,027
/ REFERENCE/DOCKET NUMBER: FORS-02565
/ TELEPHONE: (415) 705-8410
/ TELEFAX: (415) 397-8338
/ INFORMATION FOR SEQ ID NO: 137:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 620 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: double
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA (genomic)
/ US-08-757-653-137

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 1.3e-101;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGTGCGCGCATCAAGAGAGTTCTTCGGCACCAAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGGTGTGTCGCCGATCAAGAGAGTTCTTCGGCACCAAGCCAGCTGTGAGC 60
QY 96 CAGTTTCATGGACACAGAACACCCGTCGTGCGGGCTCACCCACAAGCGCGCGCTGTGCGCG 155
DB 61 CAATTTCATGGACACAGAACACCCGTCGTGCGGGTTGACCCACAAGCGCGCGCTGTGCGCG 120
QY 156 CTGGCGCGCGGTGTGTCGCCGAGCGCGGGCTTGGAGGTTCCGGAGGTTCCGGAGCTGCACCG 215
DB 121 CTGGGGCCCGCGGTCTGTACAGTGAGCGTGCCGGGCTTGGAGGTTCCGGAGCTGCACCG 180
QY 216 TCCCACTACGCGCGGATGTGCCCGATCGAGACCCCGGAGGGTCCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGCTGTGCGGTGTATGCGCGGGTCAACCCGTTCCGGTTTCATCGAGCGCGGTACCGC 335
DB 241 GGCTCGCTGTGCGGTGTACGCGGGTCAACCCGTTCCGGTTTCATCGAAACCGCGTACCGC 300
QY 336 AAGGTGTCACGCGGTGTGTCACCGAGAGATCCACTACTCAGCCGCGAGGAGGAC 395
DB 301 AAGGTGTCACGCGGTGTGTCACCGAGAGATCTGTGACTTACCTGACCGCGCGAGGAGAC 360
QY 396 CCGCCACGTGGTGGCGAGCCAACTCGCGATCGACGACAAGGGCGGTTCCGCGAGGCC 455
DB 361 CGCCACGTGGTGGCACAGGCCAAATTCGCCGATCGATGCGGAGCGTTCGTTCTGAGCGCG 420
QY 456 CGGTTGCTGGTTCGCGCGAGCGCGGAGGTCGAGTACGTGCTTCGTCGAGGTGGAC 515
DB 421 CGCGTGTGTCGCGCGAAGCGCGGAGGTGGAGTACGTGCTTCGTCGAGGTGGAC 480
QY 516 TACATGGAGCTGTGCGCGCGCAGATGGTGTGCGTGGCCACCGCGGATGATCCCGTTCTCTC 575
DB 481 TACATGGAGCTGTGCGCGCGCAGATGGTGTGCGTGGCCACCGCGGATGATCCCTTCTCTG 540
QY 576 GAGCAGCAGCAGCCAAACCGTTCCTGTATGGGCGGCCAAACATGACGCGCGCGGTTCG 635
```

```

Db      241  GGTCGCTGCTGGTGTACGCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCGC 300
Qy      336  AAGGTGGTCGACGGCGTGTGTACCGACGAGATCCACTACCTGACCGCCGACGAGGAGGAC 395
Db      301  AAGGTGGTCGACGGCGTGTGTAGCGACGAGATCGTGTACCTGACCGCCGACGAGGAGGAC 360
Qy      396  CGCCACGTGGTGGCGGCGCCAACTCGCCGATCGACGACAAGGGCGGGTTTCGGGAGGCC 455
Db      361  CGCCACGTGGTGGCAAGGCCCAATTGCGCGATCGATGCGGACGGTGGCTTCGTCGAGCCG 420
Qy      456  CGGGTCTGCTGCTCCGCGCAAGCGCGGCGAGGTGAGTACGTGCTGCTCCGAGGTGGAC 515
Db      421  CGCGTCTGCTCGCGCGCAAGCGCGGCGAGGTGAGTACGTGCTGCTCCGAGGTGGAC 480
Qy      516  TACATGGACGTGTCGCCCGCCAGATGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTC 575
Db      481  TACATGGACGTGTCGCCCGCCAGATGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTC 540
Qy      576  GAGCAGGACGACGCCAACCGTGCCTGATGGGGGCCAACATCGACGGCCAGGCGGTTCGG 635
Db      541  GAGCAGGACGACGCCAACCGTGCCTCATGGGGGCCAAACATCGACGGCCAGGCGGTTCGG 600
Qy      636  CTGGTCCGACGAGCGGCC 655
Db      601  CTGGTCCGTAGCAGGCCCC 620

```

Search completed: August 24, 2005, 22:24:58
 Job time : 115.459 secs

This page blank (usproj)

GenCore version 5.1.6
Copyright (C) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 21:58:55 ; Search time 451.661 Seconds
(without alignments)
10213.139 Million cell updates/sec

Title: US-09-285-306-7
Perfect score: 705
Sequence: 1 cccaggagtgaggcgatc.....ggcgatcgacgcgcgacgt 705

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 7331713 seqs, 327154945 residues

Total number of hits satisfying chosen parameters: 14663426

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications NA:*

1:	/cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq.*
2:	/cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq.*
3:	/cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq.*
4:	/cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq.*
5:	/cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq.*
6:	/cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq.*
7:	/cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq.*
8:	/cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq.*
9:	/cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq.*
10:	/cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq.*
11:	/cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq.*
12:	/cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq.*
13:	/cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq.*
14:	/cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq.*
15:	/cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq.*
16:	/cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq.*
17:	/cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq.*
18:	/cgn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq.*
19:	/cgn2_6/ptodata/1/pubpna/US10G_PUBCOMB.seq.*
20:	/cgn2_6/ptodata/1/pubpna/US10H_PUBCOMB.seq.*
21:	/cgn2_6/ptodata/1/pubpna/US10I_PUBCOMB.seq.*
22:	/cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
23:	/cgn2_6/ptodata/1/pubpna/US11A_PUBCOMB.seq.*
24:	/cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq.*
25:	/cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq.*
26:	/cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	ID	Description
1	705	100.0	705	US-09-285-306-4
2	705	100.0	705	US-09-285-306-5
3	705	100.0	705	US-09-285-306-6
4	705	100.0	705	US-09-285-306-7
5	705	100.0	705	US-09-285-306-8
6	705	100.0	705	US-09-285-306-9
7	705	100.0	705	US-09-285-306-12

8	705	100.0	705	US-09-285-306-13	Sequence 13, Appl
9	705	100.0	705	US-09-285-306-14	Sequence 14, Appl
10	705	100.0	705	US-09-285-306-15	Sequence 15, Appl
11	705	100.0	705	US-09-285-306-16	Sequence 16, Appl
12	703.4	99.8	705	US-09-285-306-17	Sequence 17, Appl
13	695	98.6	705	US-09-285-306-18	Sequence 18, Appl
14	693.4	98.4	705	US-09-285-306-19	Sequence 19, Appl
15	691	98.0	705	US-09-285-306-20	Sequence 20, Appl
16	691	98.0	3444	US-10-282-122A-25737	Sequence 21, Appl
17	687	97.4	687	US-09-285-306-21	Sequence 22, Appl
18	687	97.4	687	US-09-285-306-22	Sequence 23, Appl
19	687	97.4	687	US-09-285-306-23	Sequence 24, Appl
20	687	97.4	687	US-09-285-306-24	Sequence 25, Appl
21	687	97.4	687	US-09-285-306-25	Sequence 26, Appl
22	687	97.4	687	US-09-285-306-26	Sequence 27, Appl
23	687	97.4	687	US-09-285-306-27	Sequence 28, Appl
24	687	97.4	687	US-09-285-306-28	Sequence 29, Appl
25	660.2	93.6	705	US-09-285-306-29	Sequence 30, Appl
26	658.6	93.4	705	US-09-285-306-30	Sequence 31, Appl
27	655.4	93.0	705	US-09-285-306-31	Sequence 32, Appl
28	655.4	93.0	705	US-09-285-306-32	Sequence 33, Appl
29	655.4	93.0	705	US-09-285-306-33	Sequence 34, Appl
30	655.4	93.0	705	US-09-285-306-34	Sequence 35, Appl
31	655.4	93.0	705	US-09-285-306-35	Sequence 36, Appl
32	653.8	92.7	705	US-09-285-306-36	Sequence 37, Appl
33	653.8	92.7	705	US-09-285-306-37	Sequence 38, Appl
34	653.8	92.7	705	US-09-285-306-38	Sequence 39, Appl
35	653.8	92.7	705	US-09-285-306-39	Sequence 40, Appl
36	653.8	92.7	705	US-09-285-306-40	Sequence 41, Appl
37	652.2	92.5	705	US-09-285-306-41	Sequence 42, Appl
38	652.2	92.5	705	US-09-285-306-42	Sequence 43, Appl
39	652.2	92.5	705	US-09-285-306-43	Sequence 44, Appl
40	652.2	92.5	705	US-09-285-306-44	Sequence 45, Appl
41	642.2	91.1	687	US-09-285-306-45	Sequence 46, Appl
42	642.2	91.1	687	US-09-285-306-46	Sequence 47, Appl
43	637.4	90.4	687	US-09-285-306-47	Sequence 48, Appl
44	635.8	90.2	687	US-09-285-306-48	Sequence 49, Appl
45	635.8	90.2	687	US-09-285-306-49	Sequence 50, Appl

ALIGNMENTS

RESULT 1
US-09-285-306-4
; Sequence 4, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengrae, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO: 4
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-4

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CCCAGGAGCGTGGAGCGGATCACCGCAGACCCCTGATCAACATCGTCCAGTCGTCGGCGG 60
Db 1 CCCAGGAGCGTGGAGCGGATCACCGCAGACCCCTGATCAACATCGTCCAGTCGTCGGCGG 60

Qy	61	CGATCAAGGAGTTC	TTGGCACCACGACAGCTGT	TCCAGTTCATGGACAGAA	CAACCCCG	120
Db	61	CGATCAAGGAGTTC	TTGGCACCACGACAGCTGT	TCCAGTTCATGGACAGAA	CAACCCCG	120
Qy	121	TGTCGGGGCTAC	CCACAAAGCGCCCTGT	TCGGCGCTGGGGCCGGGTG	GTCTGCCGGG	180
Db	121	TGTCGGGGCTAC	CCACAAAGCGCCCTGT	TCGGCGCTGGGGCCGGGTG	GTCTGCCGGG	180
Qy	181	AGCGGCGCGGGT	TGGAGTTCGCGACGTG	CCACCCCTCCCACTACGGCCGGAT	TGCCCGA	240
Db	181	AGCGGCGCGGGT	TGGAGTTCGCGACGTG	CCACCCCTCCCACTACGGCCGGAT	TGCCCGA	240
Qy	241	TCGAGACCCCGG	ANGGGTCCCAACATCG	GTCTGATCGGCTCGCTGT	CGGTGTATGCGCGGG	300
Db	241	TCGAGACCCCGG	ANGGGTCCCAACATCG	GTCTGATCGGCTCGCTGT	CGGTGTATGCGCGGG	300
Qy	301	TCAACCCGTT	TCGGGTTCATCGAGAC	CGCCGTACCGCAAGGT	TGGTCGACGGCGTGGTCA	360
Db	301	TCAACCCGTT	TCGGGTTCATCGAGAC	CGCCGTACCGCAAGGT	TGGTCGACGGCGTGGTCA	360
Qy	361	ACGAGATCACT	ACTCTGACCGCCGACG	AGGAGGACCGCCAGCT	TGGTGGCGAGGCCAA	420
Db	361	ACGAGATCACT	ACTCTGACCGCCGACG	AGGAGGACCGCCAGCT	TGGTGGCGAGGCCAA	420
Qy	421	CGCCGATCGAC	GACAAAGGCGCGTT	TCGCGGAGGCGCCGGGT	GTCTGGTCCGCGCGCA	480
Db	421	CGCCGATCGAC	GACAAAGGCGCGTT	TCGCGGAGGCGCCGGGT	GTCTGGTCCGCGCGCA	480
Qy	481	CGGAGTTCGAG	TACGTGCCCTCGTCCGAG	GTGGACTACATGGAC	CGTTCGCCCGCGCCAG	540
Db	481	CGGAGTTCGAG	TACGTGCCCTCGTCCGAG	GTGGACTACATGGAC	CGTTCGCCCGCGCCAG	540
Qy	541	TGGTGTTCGT	TGGGCACCGCGATG	ATCCCGTTCTTCGAGAC	GACGACCCAA	600
Db	541	TGGTGTTCGT	TGGGCACCGCGATG	ATCCCGTTCTTCGAGAC	GACGACCCAA	600
Qy	601	TGATGGGCGCC	AAACATGACAGCCAC	GAGCGGTTCCGCT	TGGTGGCAGAGCGCCGCT	660
Db	601	TGATGGGCGCC	AAACATGACAGCCAC	GAGCGGTTCCGCT	TGGTGGCAGAGCGCCGCT	660
Qy	661	TGGGCACCGGC	ATGAGCTGCGCGCGG	CGCATCGACGCGCGCA	CGT	705
Db	661	TGGGCACCGGC	ATGAGCTGCGCGCGG	CGCATCGACGCGCGCA	CGT	705

RESULT 2
US-09-285-306-5

```

? Sequence 5, Application US/09285306A
? Publication No. US20020187467A1
? GENERAL INFORMATION:
? APPLICANT: GINGERAS, Thomas
? APPLICANT: Drenkow, Jorg
? APPLICANT: Affymetrix, Inc.
? TITLE OF INVENTION: Mycobacterial rpoB Sequences
? FILE REFERENCE: 018547-0185700S
? CURRENT APPLICATION NUMBER: US/09/285,306A
? CURRENT FILING DATE: 1999-04-02
? EARLIER APPLICATION NUMBER: US 60/080,616
? EARLIER FILING DATE: 1998-04-03
? NUMBER OF SEQ ID NOS: 181
? SOFTWARE: FastSeq for Windows Version 3.0
? SEQ ID NO 5
? LENGTH: 705
? TYPE: DNA
? ORGANISM: Mycobacterium avium
? US-09-285-306-5

```

```
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels
```

Qy 1 CCCAGGACGTGGAGGGGATCACACCGGAGACCTGATCAACATCCGTCCAGTCGTGGCGG 60

1	CCCAGGACGTGGAGGCGGATCACACCGAGACCCTGATCAACATCCGTCCAGTTCGTGGCGG	60
61	CGATCAAGGAGTCTTTTCGGCACACGACGAGCTGTCCAGATTTCATGGACACGAAACAACCCGC	120
61	CGATCAAGGAGTCTTTTCGGCACACGACGAGCTGTCCAGATTTCATGGACACGAAACAACCCGC	120
121	TGTCGGGGCTCACCCACAAGCGCGGCTGTCTGGCGCTTGGGCCCGGGTGGTCTGTCTCCGGG	180
121	TGTCGGGGCTCACCCACAAGCGCGGCTGTCTGGCGCTTGGGCCCGGGTGGTCTGTCTCCGGG	180
181	AGCGGGCCGGGCTGGAGGTCGCGCGAGCTGCACCCGCTCCCACTACGCGCGGATGTGCCCGA	240
181	AGCGGGCCGGGCTGGAGGTCGCGCGAGCTGCACCCGCTCCCACTACGCGCGGATGTGCCCGA	240
241	TCGAGACCCCGGAGGGTCCAAACATCGGTCTGATTCGGCTCGCTGTGTTATGCGCGGG	300
241	TCGAGACCCCGGAGGGTCCAAACATCGGTCTGATTCGGCTCGCTGTGTTATGCGCGGG	300
301	TCAACCGTTTCGGGTTTCATCGACACGCGGTACCGCAAGTGGTGCAGCGCGTGGTCAACCG	360
301	TCAACCGTTTCGGGTTTCATCGACACGCGGTACCGCAAGTGGTGCAGCGCGTGGTCAACCG	360
361	ACGAGATCCACTACTGACCGCCGACGAGGAGGACCGCCACGTTGGTGGCGCAGGCCAACT	420
361	ACGAGATCCACTACTGACCGCCGACGAGGAGGACCGCCACGTTGGTGGCGCAGGCCAACT	420
421	CGCCGATCGACGACAGAGGGCCGTTTCGGAGAGCCCGGGTCTGGTTCGCCCGCAAGCGCG	480
421	CGCCGATCGACGACAGAGGGCCGTTTCGGAGAGCCCGGGTCTGGTTCGCCCGCAAGCGCG	480
481	GCAGGTTCGAGTACGTGCCCTCGTCCGAGGTGACATCATGGACGTGTGCGCCGCGCAGA	540
481	GCAGGTTCGAGTACGTGCCCTCGTCCGAGGTGACATCATGGACGTGTGCGCCGCGCAGA	540
541	TGTTGTTCGTTGGCCACCGCGATGATCCGTTCTTCGAGCAACGACGACGCGAACCGTGC	600
541	TGTTGTTCGTTGGCCACCGCGATGATCCGTTCTTCGAGCAACGACGACGCGAACCGTGC	600
601	TGATGGGCGCAACATGTCAGCGCCGCTTCCGCTGGTGGCAGCGAGGGCCGCTGG	660
601	TGATGGGCGCAACATGTCAGCGCCGCTTCCGCTGGTGGCAGCGAGGGCCGCTGG	660
661	TGGGCAACCGCATGGAGCTGCGCGCGGCGATCGACGCGCGACGT	705
661	TGGGCAACCGCATGGAGCTGCGCGCGGCGATCGACGCGCGACGT	705

```

RESULT 3
US-09-285-306-6
; Sequence 6, Application US/09285306A
; Publication No. US2002018467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: Fast-SEQ for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-6

```

Query Match	100.0%;	Score 705;	DB 9;	Length 705;
Best Local Similarity	100.0%;	Pred. No. 8.2e-156;		
Matches 705;	Conservative	0;	Mismatches	0;
			Indels	

0:

```

QY 1 CCAGGACGTGGAGCGGATCACACCGCAGACCTTGATCAACATCCGTCCAGTCTGTGGCGG 60
Db 1 CCAGGACGTGGAGCGGATCACACCGCAGACCTTGATCAACATCCGTCCAGTCTGTGGCGG 60
QY 61 CGATCAAGAGTTCCTTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAACACCCCGC 120
Db 61 CGATCAAGAGTTCCTTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAACACCCCGC 120
QY 121 TGTCCGGGCTCACCAAGCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCGGG 180
Db 121 TGTCCGGGCTCACCAAGCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCGGG 180
QY 181 AGCGGCGCGGCTGGAGTCCCGGACCGTCCACCTACGCGCGGATGTGCCCGA 240
Db 181 AGCGGCGCGGCTGGAGTCCCGGACCGTCCACCTACGCGCGGATGTGCCCGA 240
QY 241 TCAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTATGCCGGG 300
Db 241 TCAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTATGCCGGG 300
QY 301 TCAACCGGTTCCGGTTTCATCGAGACCGCTTACCGCAAGGTGTGCGCGGTGTCAAC 360
Db 301 TCAACCGGTTCCGGTTTCATCGAGACCGCTTACCGCAAGGTGTGCGCGGTGTCAAC 360
QY 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTTGTTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTTGTTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGCGTTTCGGGAGCGCGGTTGCTGGTCCGCGCAAGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTTCGGGAGCGCGGTTGCTGGTCCGCGCAAGCGG 480
QY 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGGAATACATGACGCTGTCCGCGCGCAGA 540
Db 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGGAATACATGACGCTGTCCGCGCGCAGA 540
QY 541 TGTGTCTGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCGCGCGCTGG 600
Db 541 TGTGTCTGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCGCGCGCTGG 600
QY 601 TGATGGCGCCAACTGACGCGCGGTTCCGCTGTGTCGACGAGGCGCGCTGG 660
Db 601 TGATGGCGCCAACTGACGCGCGGTTCCGCTGTGTCGACGAGGCGCGCTGG 660
QY 661 TGGGCAACCGGCATGAGCTGCGCGCGGCGATCGACGCGCGACGT 705
Db 661 TGGGCAACCGGCATGAGCTGCGCGCGGCGATCGACGCGCGACGT 705

```

RESULT 4

US-09-285-306-7

; Sequence 7, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 7

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-7

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 8.2e-156;

```

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCAGGACGTGGAGCGGATCACACCGCAGACCTTGATCAACATCCGTCCAGTCTGTGGCGG 60
Db 1 CCAGGACGTGGAGCGGATCACACCGCAGACCTTGATCAACATCCGTCCAGTCTGTGGCGG 60
QY 61 CGATCAAGAGTTCCTTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAACACCCCGC 120
Db 61 CGATCAAGAGTTCCTTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAACACCCCGC 120
QY 121 TGTCCGGGCTCACCAAGCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCGGG 180
Db 121 TGTCCGGGCTCACCAAGCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCGGG 180
QY 181 AGCGGCGCGGCTGGAGTCCCGGACCGTCCACCTACGCGCGGATGTGCCCGA 240
Db 181 AGCGGCGCGGCTGGAGTCCCGGACCGTCCACCTACGCGCGGATGTGCCCGA 240
QY 241 TCAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTATGCCGGG 300
Db 241 TCAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTATGCCGGG 300
QY 301 TCAACCGGTTCCGGTTTCATCGAGACCGCTTACCGCAAGGTGTGCGCGGTGTCAAC 360
Db 301 TCAACCGGTTCCGGTTTCATCGAGACCGCTTACCGCAAGGTGTGCGCGGTGTCAAC 360
QY 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTTGTTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTTGTTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGCGTTTCGGGAGCGCGGTTGCTGGTCCGCGCAAGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTTCGGGAGCGCGGTTGCTGGTCCGCGCAAGCGG 480
QY 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGGAATACATGACGCTGTCCGCGCGCAGA 540
Db 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGGAATACATGACGCTGTCCGCGCGCAGA 540
QY 541 TGTGTCTGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCGCGCGCTGG 600
Db 541 TGTGTCTGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCGCGCGCTGG 600
QY 601 TGATGGCGCCAACTGACGCGCGGTTCCGCTGTGTCGACGAGGCGCGCTGG 660
Db 601 TGATGGCGCCAACTGACGCGCGGTTCCGCTGTGTCGACGAGGCGCGCTGG 660
QY 661 TGGGCAACCGGCATGAGCTGCGCGCGGCGATCGACGCGCGACGT 705
Db 661 TGGGCAACCGGCATGAGCTGCGCGCGGCGATCGACGCGCGACGT 705

```

RESULT 5

US-09-285-306-8

; Sequence 8, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 8

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-8

```
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGAGGCGATCACACGCGACACCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 1 CCCAGAGCTGAGGCGATCACACGCGACACCTGATCAACATCCGTCCAGTCGTGGCGG 60

QY 61 CGATCAAGAGTCTTTCGGCACACGACGCTGTCCTCCAGTTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGAGTCTTTCGGCACACGACGCTGTCCTCCAGTTTCATGACACAGAACACCCGC 120

QY 121 TGTGGGGCTCACCCACAAGCGCGCTGTGCGGCGTGGGCCCGGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCGCTGTGCGGCGTGGGCCCGGGTCTGTCCCGGG 180

QY 181 AGCGGGCGGGCTGGAGTTCGGGAGCTGACCCGCTCCCACTACCGCCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGGAGTTCGGGAGCTGACCCGCTCCCACTACCGCCGGATGTGCCGA 240

QY 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGCTCGGTGTATGCGCGG 300
Db 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGCTCGGTGTATGCGCGG 300

QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGTGTGTCGACGCGGTGTCACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGTGTGTCGACGCGGTGTCACCG 360

QY 361 ACGAGATCCACTACCTGACCCGCGGAGGAGGACCGCCACGTCGTGGTGGCGGCGCAACT 420
Db 361 ACGAGATCCACTACCTGACCCGCGGAGGAGGACCGCCACGTCGTGGTGGCGGCGCAACT 420

QY 421 CGCCGATCGAGCAAGGCGCGGTTCGCGAGGCGCGGTGCTGCTCGCGCGCAAGGCGG 480
Db 421 CGCCGATCGAGCAAGGCGCGGTTCGCGAGGCGCGGTGCTGCTCGCGCGCAAGGCGG 480

QY 481 GCGAGTTCGAGTACGTCGCTCCGAGGTGGACTACATGACGCTGTCGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTCGCTCCGAGGTGGACTACATGACGCTGTCGCGCGCCAGA 540

QY 541 TGGTTCGCTGCGACCCGCGATGATCCGTTCTCGAGCAGACACGCCAACCGTGCCC 600
Db 541 TGGTTCGCTGCGACCCGCGATGATCCGTTCTCGAGCAGACACGCCAACCGTGCCC 600

QY 601 TGATGGGCGCCAACTACGACGCCAGGCGGTTCCGCTGTCGCGCAGCGGCGCGCTGG 660
Db 601 TGATGGGCGCCAACTACGACGCCAGGCGGTTCCGCTGTCGCGCAGCGGCGCGCTGG 660

QY 661 TGGGCACCGGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db 661 TGGGCACCGGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
```

```
RESULT 6
US-09-285-306-9
; Sequence 9, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 9
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
```

```
US-09-285-306-9
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGAGGCGATCACACGCGACACCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 1 CCCAGAGCTGAGGCGATCACACGCGACACCTGATCAACATCCGTCCAGTCGTGGCGG 60

QY 61 CGATCAAGAGTCTTTCGGCACACGACGCTGTCCTCCAGTTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGAGTCTTTCGGCACACGACGCTGTCCTCCAGTTTCATGACACAGAACACCCGC 120

QY 121 TGTGGGGCTCACCCACAAGCGCGCTGTGCGGCGTGGGCCCGGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCGCTGTGCGGCGTGGGCCCGGGTCTGTCCCGGG 180

QY 181 AGCGGGCGGGCTGGAGTTCGGGAGCTGACCCGCTCCCACTACCGCCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGGAGTTCGGGAGCTGACCCGCTCCCACTACCGCCGGATGTGCCGA 240

QY 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGCTCGGTGTATGCGCGG 300
Db 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGCTCGGTGTATGCGCGG 300

QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGTGTGTCGACGCGGTGTCACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGTGTGTCGACGCGGTGTCACCG 360

QY 361 ACGAGATCCACTACCTGACCCGCGGAGGAGGACCGCCACGTCGTGGTGGCGGCGCAACT 420
Db 361 ACGAGATCCACTACCTGACCCGCGGAGGAGGACCGCCACGTCGTGGTGGCGGCGCAACT 420

QY 421 CGCCGATCGAGCAAGGCGCGGTTCGCGAGGCGCGGTGCTGCTCGCGCGCAAGGCGG 480
Db 421 CGCCGATCGAGCAAGGCGCGGTTCGCGAGGCGCGGTGCTGCTCGCGCGCAAGGCGG 480

QY 481 GCGAGTTCGAGTACGTCGCTCCGAGGTGGACTACATGACGCTGTCGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTCGCTCCGAGGTGGACTACATGACGCTGTCGCGCGCCAGA 540

QY 541 TGGTTCGCTGCGACCCGCGATGATCCGTTCTCGAGCAGACACGCCAACCGTGCCC 600
Db 541 TGGTTCGCTGCGACCCGCGATGATCCGTTCTCGAGCAGACACGCCAACCGTGCCC 600

QY 601 TGATGGGCGCCAACTACGACGCCAGGCGGTTCCGCTGTCGCGCAGCGGCGCGCTGG 660
Db 601 TGATGGGCGCCAACTACGACGCCAGGCGGTTCCGCTGTCGCGCAGCGGCGCGCTGG 660

QY 661 TGGGCACCGGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db 661 TGGGCACCGGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
```

```
RESULT 7
US-09-285-306-12
; Sequence 12, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 705
```



```

; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-12

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGCGATCACCCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
   |||||
Db 1 CCAGAGCTGGAGGCGATCACCCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
   |||||

QY 61 CGATCAAGAGATTCTTCGCGACACAGCCAGCTGTCCTCAGTTTCATGACAGACAAACCCG 120
   |||||
Db 61 CGATCAAGAGATTCTTCGCGACACAGCCAGCTGTCCTCAGTTTCATGACAGACAAACCCG 120
   |||||

QY 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGCGTGGCGCGCTGCTGTCCCGGG 180
   |||||
Db 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGCGTGGCGCGCTGCTGTCCCGGG 180
   |||||

QY 181 AGCGGCGCGGCTGGAGGTCGCGGACCGCTGATCGGCTCGCTGTCGCTGATGCGCGG 240
   |||||
Db 181 AGCGGCGCGGCTGGAGGTCGCGGACCGCTGATCGGCTCGCTGTCGCTGATGCGCGG 240
   |||||

QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGCTGATCGGCTCGCTGTCGCTGATGCGCGG 300
   |||||
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGCTGATCGGCTCGCTGTCGCTGATGCGCGG 300
   |||||

QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTGACCGCAAGGTGGTTCGACGGCGTGGTCA 360
   |||||
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTGACCGCAAGGTGGTTCGACGGCGTGGTCA 360
   |||||

QY 361 ACAGATTCACCTGACCGCGGACGAGGAGACCGCCACGCTGTGGCGCAGGCCAACT 420
   |||||
Db 361 ACAGATTCACCTGACCGCGGACGAGGAGACCGCCACGCTGTGGCGCAGGCCAACT 420
   |||||

QY 421 CGCCGATCGACGACAAAGGGCGGTTTCGCGAGGCGCGGGTGTGTCGCGCGCAAGGGCG 480
   |||||
Db 421 CGCCGATCGACGACAAAGGGCGGTTTCGCGAGGCGCGGGTGTGTCGCGCGCAAGGGCG 480
   |||||

QY 481 GCGAGTTCGAGTACGTGCGCTCTGTCGAGGTGGAATACATGACGCTGTCGCGCGCAGA 540
   |||||
Db 481 GCGAGTTCGAGTACGTGCGCTCTGTCGAGGTGGAATACATGACGCTGTCGCGCGCAGA 540
   |||||

QY 541 TGGTGTGCGTGCGCACCGCGATGATCCCGTTCTCGAGCACGACGACGCAACCGTGCC 600
   |||||
Db 541 TGGTGTGCGTGCGCACCGCGATGATCCCGTTCTCGAGCACGACGACGCAACCGTGCC 600
   |||||

QY 601 TGATGGGCGCCAAACATGACGCGCGAGCGGTTCCGCTGTCGCGAGGCGCGCGCTGG 660
   |||||
Db 601 TGATGGGCGCCAAACATGACGCGCGAGCGGTTCCGCTGTCGCGAGGCGCGCGCTGG 660
   |||||

QY 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
   |||||
Db 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
   |||||

```

```

RESULT 8
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-02
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0

```

```

; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-13

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGCGATCACCCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
   |||||
Db 1 CCAGAGCTGGAGGCGATCACCCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
   |||||

QY 61 CGATCAAGAGATTCTTCGCGACACAGCCAGCTGTCCTCAGTTTCATGACAGACAAACCCG 120
   |||||
Db 61 CGATCAAGAGATTCTTCGCGACACAGCCAGCTGTCCTCAGTTTCATGACAGACAAACCCG 120
   |||||

QY 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGCGTGGCGCGCTGCTGTCCCGGG 180
   |||||
Db 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGCGTGGCGCGCTGCTGTCCCGGG 180
   |||||

QY 181 AGCGGCGCGGCTGGAGGTCGCGGACCGCTGATCGGCTCGCTGTCGCTGATGCGCGG 240
   |||||
Db 181 AGCGGCGCGGCTGGAGGTCGCGGACCGCTGATCGGCTCGCTGTCGCTGATGCGCGG 240
   |||||

QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGCTGATCGGCTCGCTGTCGCTGATGCGCGG 300
   |||||
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGCTGATCGGCTCGCTGTCGCTGATGCGCGG 300
   |||||

QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTGACCGCAAGGTGGTTCGACGGCGTGGTCA 360
   |||||
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTGACCGCAAGGTGGTTCGACGGCGTGGTCA 360
   |||||

QY 361 ACAGATTCACCTGACCGCGGACGAGGAGACCGCCACGCTGTGGCGCAGGCCAACT 420
   |||||
Db 361 ACAGATTCACCTGACCGCGGACGAGGAGACCGCCACGCTGTGGCGCAGGCCAACT 420
   |||||

QY 421 CGCCGATCGACGACAAAGGGCGGTTTCGCGAGGCGCGGGTGTGTCGCGCGCAAGGGCG 480
   |||||
Db 421 CGCCGATCGACGACAAAGGGCGGTTTCGCGAGGCGCGGGTGTGTCGCGCGCAAGGGCG 480
   |||||

QY 481 GCGAGTTCGAGTACGTGCGCTCTGTCGAGGTGGAATACATGACGCTGTCGCGCGCAGA 540
   |||||
Db 481 GCGAGTTCGAGTACGTGCGCTCTGTCGAGGTGGAATACATGACGCTGTCGCGCGCAGA 540
   |||||

QY 541 TGGTGTGCGTGCGCACCGCGATGATCCCGTTCTCGAGCACGACGACGCAACCGTGCC 600
   |||||
Db 541 TGGTGTGCGTGCGCACCGCGATGATCCCGTTCTCGAGCACGACGACGCAACCGTGCC 600
   |||||

QY 601 TGATGGGCGCCAAACATGACGCGCGAGCGGTTCCGCTGTCGCGAGGCGCGCGCTGG 660
   |||||
Db 601 TGATGGGCGCCAAACATGACGCGCGAGCGGTTCCGCTGTCGCGAGGCGCGCGCTGG 660
   |||||

QY 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
   |||||
Db 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
   |||||

```

```

RESULT 9
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-02
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0

```

; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14

```
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGAGCTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTCGGCG 60
|
|
|
Db 1 CCCAGAGCTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTCGGCG 60
|
|
|
Qy 61 CGATCAAGGAGTTCTTCGGCACCAGCAGCAGTGTCCAGTTTCATGACACAGAACCCGC 120
|
|
|
Db 61 CGATCAAGGAGTTCTTCGGCACCAGCAGCAGTGTCCAGTTTCATGACACAGAACCCGC 120
|
|
|
Qy 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCCGGCTGGGCCGGGTGGTCTGTCCCGG 180
|
|
|
Db 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCCGGCTGGGCCGGGTGGTCTGTCCCGG 180
|
|
|
Qy 181 AGCGGCGGGCTGGAGGTCGCGACGTGCAACCCGTCCCACTACGSCCGGATGTGCCGA 240
|
|
|
Db 181 AGCGGCGGGCTGGAGGTCGCGACGTGCAACCCGTCCCACTACGSCCGGATGTGCCGA 240
|
|
|
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCGGTGATGCGCGG 300
|
|
|
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCGGTGATGCGCGG 300
|
|
|
Qy 301 TCAACCCGTTCCGGTTCTCGAGACCGCTACCGCAAGTGGTGCACGCGTGGTCACCG 360
|
|
|
Db 301 TCAACCCGTTCCGGTTCTCGAGACCGCTACCGCAAGTGGTGCACGCGTGGTCACCG 360
|
|
|
Qy 361 ACGAGATCCACTACCTACCGCCGACGAGAGGACCGCAACGTGGTCGCGAGGCCAACT 420
|
|
|
Db 361 ACGAGATCCACTACCTACCGCCGACGAGAGGACCGCAACGTGGTCGCGAGGCCAACT 420
|
|
|
Qy 421 CCGCATCGACACAAAGGCGGGTTCGCGAGGCGCGGGTGTGTGTCGCGCAGAGCGG 480
|
|
|
Db 421 CCGCATCGACACAAAGGCGGGTTCGCGAGGCGCGGGTGTGTGTCGCGCAGAGCGG 480
|
|
|
Qy 481 GCGAGTTCGAGTACGTCCGTCGAGGTGGACTACATGACAGTGTGCGCGCCAGA 540
|
|
|
Db 481 GCGAGTTCGAGTACGTCCGTCGAGGTGGACTACATGACAGTGTGCGCGCCAGA 540
|
|
|
Qy 541 TGGTGTCCGTGCGCACCGCGATGATCCCGTTCTTCGAGACGACGACGCCAACCGTGCCC 600
|
|
|
Db 541 TGGTGTCCGTGCGCACCGCGATGATCCCGTTCTTCGAGACGACGACGCCAACCGTGCCC 600
|
|
|
Qy 601 TGATGGCGCCAAACATGACGCGCCAGCGGTTCCGCTGGTCGCGAGAGCGCGCTGG 660
|
|
|
Db 601 TGATGGCGCCAAACATGACGCGCCAGCGGTTCCGCTGGTCGCGAGAGCGCGCTGG 660
|
|
|
Qy 661 TGGGCACCGCATGGAGTTCGCGCGCGCATCGACGCGCGACGT 705
|
|
|
Db 661 TGGGCACCGCATGGAGTTCGCGCGCGCATCGACGCGCGACGT 705
|
|
|
```

RESULT 10
US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-16

```
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGAGCTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTCGGCG 60
|
|
|
Db 1 CCCAGAGCTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTCGGCG 60
|
|
|
Qy 61 CGATCAAGGAGTTCTTCGGCACCAGCAGCAGTGTCCCAAGTTTCATGACACAGAACCCGC 120
|
|
|
Db 61 CGATCAAGGAGTTCTTCGGCACCAGCAGCAGTGTCCCAAGTTTCATGACACAGAACCCGC 120
|
|
|
Qy 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCCGGCTGGGCCGGGTGGTCTGTCCCGG 180
|
|
|
Db 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCCGGCTGGGCCGGGTGGTCTGTCCCGG 180
|
|
|
Qy 181 AGCGGCGGGCTGGAGTTCGCGACGTGCAACCCGTCCCACTACGSCCGGATGTGCCGA 240
|
|
|
Db 181 AGCGGCGGGCTGGAGTTCGCGACGTGCAACCCGTCCCACTACGSCCGGATGTGCCGA 240
|
|
|
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCGGTGATGCGCGG 300
|
|
|
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCGGTGATGCGCGG 300
|
|
|
Qy 301 TCAACCCGTTCCGGTTCTCGAGACCGCTACCGCAAGTGGTGCACGCGTGGTCACCG 360
|
|
|
Db 301 TCAACCCGTTCCGGTTCTCGAGACCGCTACCGCAAGTGGTGCACGCGTGGTCACCG 360
|
|
|
Qy 361 ACGAGATCCACTACCTACCGCCGACGAGAGGACCGCAACGTGGTCGCGAGGCCAACT 420
|
|
|
Db 361 ACGAGATCCACTACCTACCGCCGACGAGAGGACCGCAACGTGGTCGCGAGGCCAACT 420
|
|
|
Qy 421 CCGCATCGACACAAAGGCGGGTTCGCGAGGCGCGGGTGTGTGTCGCGCAGAGCGG 480
|
|
|
Db 421 CCGCATCGACACAAAGGCGGGTTCGCGAGGCGCGGGTGTGTGTCGCGCAGAGCGG 480
|
|
|
Qy 481 GCGAGTTCGAGTACGTCCGTCGAGGTGGACTACATGACAGTGTGCGCGCCAGA 540
|
|
|
Db 481 GCGAGTTCGAGTACGTCCGTCGAGGTGGACTACATGACAGTGTGCGCGCCAGA 540
|
|
|
Qy 541 TGGTGTCCGTGCGCACCGCGATGATCCCGTTCTTCGAGACGACGACGCCAACCGTGCCC 600
|
|
|
Db 541 TGGTGTCCGTGCGCACCGCGATGATCCCGTTCTTCGAGACGACGACGCCAACCGTGCCC 600
|
|
|
Qy 601 TGATGGCGCCAAACATGACGCGCCAGCGGTTCCGCTGGTCGCGAGAGCGCGCTGG 660
|
|
|
Db 601 TGATGGCGCCAAACATGACGCGCCAGCGGTTCCGCTGGTCGCGAGAGCGCGCTGG 660
|
|
|
Qy 661 TGGGCACCGCATGGAGTTCGCGCGCGCATCGACGCGCGACGT 705
|
|
|
Db 661 TGGGCACCGCATGGAGTTCGCGCGCGCATCGACGCGCGACGT 705
|
|
|
```

RESULT 11
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02

```

; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

```

```

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCAGAGCGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
DB 1 CCAGAGCGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
QY 61 CGATCAAGAGTTCTTCCGACACCGCAGCGAGTGTCCAGTTTCATGGACGAGAAACCCCG 120
DB 61 CGATCAAGAGTTCTTCCGACACCGCAGCGAGTGTCCAGTTTCATGGACGAGAAACCCCG 120
QY 121 TGTCCGGGGTCAACCAAGCGCGCTGTGCGCGCTGGCGCGGTGTCTGTCCCGGG 180
DB 121 TGTCCGGGGTCAACCAAGCGCGCTGTGCGCGCTGGCGCGGTGTCTGTCCCGGG 180
QY 181 AGCGGGCGGGTGGAGGTCGCGAGTGCACCCGCTCCCACTACGCGCGGATGTGCCCGA 240
DB 181 AGCGGGCGGGTGGAGGTCGCGAGTGCACCCGCTCCCACTACGCGCGGATGTGCCCGA 240
QY 241 TGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGTGTGCGGTGTATGCGCGGG 300
DB 241 TGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGTGTGCGGTGTATGCGCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGTGCGAGCGGTGTCCACCG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGTGCGAGCGGTGTCCACCG 360
QY 361 ACAGATCCACTACCTGACCGCGAGGAGACCGCCACGTTGTGGCGAGGCCAACT 420
DB 361 ACAGATCCACTACCTGACCGCGAGGAGACCGCCACGTTGTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGCGTTCCGAGAGCGCGGTTGTGTTCCGCGCAAGCGG 480
DB 421 CGCCGATCGACGACAAAGGCGCGTTCCGAGAGCGCGGTTGTGTTCCGCGCAAGCGG 480
QY 481 GCGAGTCCGAGTACGTCCTCGTCCGAGTGGACTACATGACGTTGTGCGCGCGCAGA 540
DB 481 GCGAGTCCGAGTACGTCCTCGTCCGAGTGGACTACATGACGTTGTGCGCGCGCAGA 540
QY 541 TGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGACGACGACGACCGCCGTCGCC 600
DB 541 TGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGACGACGACGACCGCCGTCGCC 600
QY 601 TGATGGCGCCAAATCGACGCGCCAGCGGTTCCGTTGTGCGACGAGCGCGCTGG 660
DB 601 TGATGGCGCCAAATCGACGCGCCAGCGGTTCCGTTGTGCGACGAGCGCGCTGG 660
QY 661 TGGGACCCGCGATGGAGTGTGCGCGCGCGGATCGACGCGGCGAGCT 705
DB 661 TGGGACCCGCGATGGAGTGTGCGCGCGCGGATCGACGCGGCGAGCT 705

```

```

RESULT 12
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.

```

```

; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

Query Match      99.8%; Score 703.4; DB 9; Length 705;
Best Local Similarity 99.9%; Pred. No. 1.9e-155;
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCAGAGCGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
DB 1 CCAGAGCGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
QY 61 CGATCAAGAGTTCTTCCGACACCGCAGCGAGTGTCCAGTTTCATGGACGAGAAACCCCG 120
DB 61 CGATCAAGAGTTCTTCCGACACCGCAGCGAGTGTCCAGTTTCATGGACGAGAAACCCCG 120
QY 121 TGTCCGGGGTCAACCAAGCGCGCTGTGCGCGCTGGCGCGGTGTCTGTCCCGGG 180
DB 121 TGTCCGGGGTCAACCAAGCGCGCTGTGCGCGCTGGCGCGGTGTCTGTCCCGGG 180
QY 181 AGCGGGCGGGTGGAGGTCGCGAGTGCACCCGCTCCCACTACGCGCGGATGTGCCCGA 240
DB 181 AGCGGGCGGGTGGAGGTCGCGAGTGCACCCGCTCCCACTACGCGCGGATGTGCCCGA 240
QY 241 TGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGTGTGCGGTGTATGCGCGGG 300
DB 241 TGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGTGTGCGGTGTATGCGCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGTGCGAGCGGTGTCCACCG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGTGCGAGCGGTGTCCACCG 360
QY 361 ACAGATCCACTACCTGACCGCGAGGAGACCGCCACGTTGTGGCGAGGCCAACT 420
DB 361 ACAGATCCACTACCTGACCGCGAGGAGACCGCCACGTTGTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGCGTTCCGAGAGCGCGGTTGTGTTCCGCGCAAGCGG 480
DB 421 CGCCGATCGACGACAAAGGCGCGTTCCGAGAGCGCGGTTGTGTTCCGCGCAAGCGG 480
QY 481 GCGAGTCCGAGTACGTCCTCGTCCGAGTGGACTACATGACGTTGTGCGCGCGCAGA 540
DB 481 GCGAGTCCGAGTACGTCCTCGTCCGAGTGGACTACATGACGTTGTGCGCGCGCAGA 540
QY 541 TGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGACGACGACGACCGCCGTCGCC 600
DB 541 TGTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGACGACGACGACCGCCGTCGCC 600
QY 601 TGATGGCGCCAAATCGACGCGCCAGCGGTTCCGTTGTGCGACGAGCGCGCTGG 660
DB 601 TGATGGCGCCAAATCGACGCGCCAGCGGTTCCGTTGTGCGACGAGCGCGCTGG 660
QY 661 TGGGACCCGCGATGGAGTGTGCGCGCGCGGATCGACGCGGCGAGCT 705
DB 661 TGGGACCCGCGATGGAGTGTGCGCGCGCGGATCGACGCGGCGAGCT 705

```

```

RESULT 13
US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas

```


This Page Blank (uspio)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds
(without alignments)
11150.034 Million cell updates/sec

Title: US-09-285-306-8
Perfect score: 705
Sequence: 1 ccagagactggagcgatc.....ggcgatcgacggcgagcgt 705

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents NA: *
1: /cgn2_6/ptodata/1/ina/5A COMB.seq: *
2: /cgn2_6/ptodata/1/ina/5B COMB.seq: *
3: /cgn2_6/ptodata/1/ina/6A COMB.seq: *
4: /cgn2_6/ptodata/1/ina/6B COMB.seq: *
5: /cgn2_6/ptodata/1/ina/PCTUS COMB.seq: *
6: /cgn2_6/ptodata/1/ina/backfiles1.seq: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	3	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	3	US-08-520-946-135
11	530.4	75.2	620	3	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	3	US-08-520-946-136
19	528.8	75.0	620	3	US-08-520-946-137
20	528.8	75.0	620	3	US-08-520-946-139
21	528.8	75.0	620	3	US-08-520-946-140
22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	411	58.3	5099	4	US-09-887-052-1

28	409.4	58.1	5099	4	US-09-887-052-3	Sequence 3, Appli
29	409.4	58.1	5099	4	US-09-887-052-5	Sequence 5, Appli
30	402	57.0	4227	4	US-09-902-540-8919	Sequence 8919, Ap
31	402	57.0	9367	4	US-09-902-540-951	Sequence 951, App
32	371.2	52.7	4074	4	US-09-252-991A-4737	Sequence 4737, Ap
33	371.2	52.7	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
34	337.2	47.8	4083	4	US-09-489-039A-22	Sequence 22, Appl
35	337.2	47.8	4206	4	US-09-489-039A-30	Sequence 30, Appl
36	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
37	293.4	41.6	432	3	US-09-082-614A-36	Sequence 36, Appl
38	286.2	40.6	324	3	US-08-750-088A-36	Sequence 36, Appl
39	286.2	40.6	324	4	US-09-722-319-36	Sequence 1097, Ap
40	265.2	37.6	2964	4	US-09-540-236-1097	Sequence 3177, Ap
41	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 20, Appl
42	265.2	37.6	31063	4	US-09-596-002-20	Sequence 35, Appl
43	255.6	36.3	319	3	US-08-750-088A-35	Sequence 35, Appl
44	255.6	36.3	319	4	US-09-722-319-35	Sequence 401, App
45	249.8	35.4	11935	4	US-09-634-238-401	

ALIGNMENTS

RESULT 1
US-08-797-812-24
; Sequence 24, Application US/08797812
; Patent No. 6228575
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas A.
; APPLICANT: Mack, David
; APPLICANT: Chee, Mark S.
; APPLICANT: Berno, Anthony J.
; APPLICANT: Stryer, Lubert
; APPLICANT: Ghandour, Ghassan
; APPLICANT: Wang, Ching
; TITLE OF INVENTION: Chip-Based Species Identification and
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/797,812
; FILING DATE: 07-FEB-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/017,765
; FILING DATE: 15-MAY-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/629,031
; FILING DATE: 08-APR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/012,631
; FILING DATE: 01-MAR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/011,339
; FILING DATE: 08-FEB-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Fitts, Renee A.
; REGISTRATION NUMBER: 35,136
; REFERENCE/DOCKET NUMBER: 16528X-018550
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-326-2400
; TELEFAX: 415-326-2422


```
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.4%; Pred. No. 1.2e-116;
Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

QY 1 CCAGGACGTGGAGGCGATCACCCGAGACCCCTGATCAACATCCGTCCAGTCTGTGCGG 60
Db 761003 CCAGGACGTGGAGGCGATCACCCGAGACCCCTGATCAACATCCGCGCGTGTGCGG 761062

QY 61 CGATCAAGGAGTTCTTCCGACACGACGCTGCCAGTTCATGACGACCAACACCCG 120
Db 761063 CGATCAAGGAGTTCTTCCGACACGACGCTGCCAGTTCATGACGACCAACACCCG 761122

QY 121 TGTGCGGGCTCACCCACAGCGCGCTGTCGCGCTGGCGCGGTGCTCTCCCGGG 180
Db 761123 TGTGCGGGTTGACCCACAGCGCGCTGTCGCGCTGGCGCGGTGCTCTCCAGTG 761182

QY 181 AGCGGCGCGGCTGGAGGTTCGCGAGGTGCACCCGCTCCCACTACGCGCGGATGCGCCGA 240
Db 761183 AGCGTCCGCGCTGGAGGTTCGCGAGGTGCACCCGCTCCCACTACGCGCGGATGCGCCGA 761242

QY 241 TCAGACCCCGGAGGGTCCCAACATCGTCTGATCGGCTGCTGCTGCTGATGCGGGG 300
Db 761243 TCAGAACCCCTGAGGGGCGCAACATCGTCTGATCGGCTGCTGCTGCTGATGCGGGG 761302

QY 301 TCAACCCGTTCCGGTTTCATCGACGCGCTGACGCAAGGTGCTGACGCGGTGCTCACCG 360
Db 761303 TCAACCCGTTCCGGTTTCATCGAACCGCGTACCGCAAGGTGCTGACGCGGTGCTTAGCG 761362

QY 361 ACAGATCCCACTACCTGACCGCGAGGAGGACCGCACGCTGCTGGCGAGGCCAACT 420
Db 761363 ACAGATCGTGTACTGACCGCGAGGAGGACCGCACGCTGCTGGCGAGGCCAACT 761422

QY 421 CGCGGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGGTGTGCTGCTGCGCGCAAGCGG 480
Db 761423 CGCGGATCGATCGGACGCGTTCGCTGAGCGCGCGTGTGCTGCTGCGCGCAAGCGG 761482

QY 481 GCGAGTTCGAGTACGTCCTGCTCGAGGTGACACTACATGACGCTGCTGCGCGCCAGA 540
Db 761483 GCGAGTTCGAGTACGTCCTGCTGAGGTGACACTACATGACGCTGCTGCGCGCCAGA 761542

QY 541 TGTGTCGCTGGCGCACCGGATGATCCGCTTCCTCGAGCACGACGACGCAACCGTGGCC 600
Db 761543 TGTGTCGCTGGCGCACCGGATGATTCCTTCCTGAGGACGACGACGCAACCGTGGCC 761602

QY 601 TGATGGGCGCAACATGACGCGCGAGCGGCTTCGCTGCTGCTGCTGCTGCTGCTGCTG 660
Db 761603 TCATGGGCGCAACATGACGCGCGAGCGGCTTCGCTGCTGCTGCTGCTGCTGCTGCTG 761662

QY 661 TGGGCAACCGCATGGAGCTGCGCGCGCGATCCACCGG 699
Db 761663 TGGGCAACCGCATGGAGCTGCGCGCGCGATCCACCGG 761701

RESULT 4
US-08-313-185-57
```

```
; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-313-185-57

Query Match      79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.1e-107;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCAACCCGACACCCCTGATCAACATCCGTCCAGTCTGCGG 60
Db 1124 CCCAGACGTGGAGGCGATCAACCCGACACCCCTGATCAACATCCGTCCAGTCTGCGG 1183

QY 61 CGATCAAGGAGTCTTCGCGACACCGCGCTGCTGCGCGCTGGCGCGGTGCTGCTGCCCGG 120
Db 1184 CTATCAAGGAATCTTCGCGACACCGCGCTGCTGCGCGCTGGCGCGGTGCTGCTGCCCGG 1243

QY 121 TGTGCGGGCTCACCCACAGCGCGCTGCTGCGCGCTGGCGCGGTGCTGCTGCCCGG 180
Db 1244 TGTGCGGGCTGACCCACAGCGCGCTGCTGCGCGCTGGCGCGGTGCTGCTGCCCGG 1303

QY 181 AGCGGCGCGGCTGGAGGTTCGCGACGTCGACCCGCTCCCACTACGCGCGGATGTCGCCGA 240
Db 1304 AGCGTCCGCGGCTAGAGGTTCGCGACGTCGACCCCTTCGCACTACGCGCGGATGTCGCCGA 1363

QY 241 TCAGACCCCGGAGGTCCTCAACATCGTCTGATCGGCTGCTGCTGCTGCTGCTGCTG 300
Db 1364 TCAGACCTCCGAGGCGCGCAACATAGGTCTGATCGGTTTCATTTGTCGGTGTACGCGCGG 1423

QY 301 TCAACCCGTTCCGGTTTCATCGAGAGCGCGTACCGAAGGTGCTGACAGCGGTGTCACCG 360
Db 1424 TCAACCCGTTCCGGTTTCATCGAAGACCGGTACCGAAGGTGCTGACAGCGGTGTCACCG 1483
```


ZIP: 55402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/250,030
FILING DATE: 26-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Muehling, Ann M.
REGISTRATION NUMBER: 33,977
REFERENCE/DOCKET NUMBER: 150.105US1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-339-0331
TELEFAX: 612-339-3061
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 970 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
US-08-250-030-1

Query Match 76.7%; Score 540.4; DB 1; Length 970;
Best Local Similarity 91.1%; Pred. No. 5e-104;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

```
QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTCGCGG 60
DB 341 CCCAGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCGTCGCGG 400

QY 61 CGATCAAGAGTTCCTCGGCACCGACGCTGCCAGTTTCATGGACGAGCAACACCCCG 120
DB 401 CGATCAAGAGTTCCTCGGCACCGACGCTGCCAGTTTCATGGACGAGCAACACCCCG 460

QY 121 TGTCCGGGTCACCCACAGCGCGCTGTGCGCGCTGGCGCCGGTGTGTGTCTGCCGG 180
DB 461 TGTCCGGGTTGACCCACAGCGCGACTGTGCGCGCTGGCGCCGGTGTGTGTCTGCCGG 520

QY 181 AGCGGCGCGGCTGGAGGTCGCGGACGTCACCGCTCCCACTACGCGCGGATGTCGCCGA 240
DB 521 AGCGTCCGGGCTGGAGGTCGCGGACGTCACCGCTCCCACTACGCGCGGATGTCGCCGA 580

QY 241 TCAGACCCCGGAGGTCCTCGGCACCGACGCTGCCAGTTTCATGGACGAGCAACACCCCG 300
DB 581 TCAGAACCCCTGAGGGGCCAACATCGGCTCGCTGATCGGCTCGCTGTCGGTGTACGCGGG 640

QY 301 TCAACCCGTTCCGGTTCATCGAGACGCGCTACCGCAAGTGTGTGACGCGGTGGTCAACCG 360
DB 641 TCAACCCGTTCCGGTTCATCGAGAACGCGCTGTCGCGCGCTGGCGCCGGTGTGTGTACG 700

QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGACCGCCACGTCGTTGGTGGCGAGGCCAACT 420
DB 701 ACGAGATCGTGTACCTGACCGCGCAGGAGACCGCCACGTCGTTGGTGGCAGCGCCAACT 760

QY 421 CGCGGATCGACGACAAAGGCGCGTTCGCGAGGCGCCGGTGTGTCGTCGCGCGCAAGCGG 480
DB 761 CGCGGATCGATGCGGACGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 820

QY 481 GCGAGTTCGAGTACGTGCCCTCGTCGAGGTGGAATACATGACGTCGTCGTCGTCGTCGTCGTCG 540
DB 821 GCGAGTTCGAGTACGTGCCCTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 880

QY 541 TGTGTCCGTGGCCACCGGATGATCCCGTTCTCGAGCACGACGACGCGCAACCCGTGCC 600
DB 881 TGTGTCCGTGGCCACCGGATGATCCCGTTCTCGAGCACGACGACGCGCAACCCGTGCC 940

QY 601 TGATGGGCGCAACATGACGCGCGCAGGCGG 630
DB 941 TCATGGGCGCAACATGACGCGCGCAGGCGG 970
```

RESULT 7
PCT-US95-06790-1
Sequence 1, Application PC/TUS9506790
GENERAL INFORMATION:
APPLICANT: Mayo Foundation for Medical Education and Research
APPLICANT: and Hoffmann-La Roche Inc.
TITLE OF INVENTION: Detection of a Genetic Locus Encoding
TITLE OF INVENTION: Resistance to Rifampin
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: Schwegman, Lundberg & Woessner
STREET: 3500 IDS Center
CITY: Minneapolis
STATE: MN
COUNTRY: USA
ZIP: 55402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/06790
FILING DATE: 26-MAY-1995
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Raasch, Kevin W.
REGISTRATION NUMBER: 35,651
REFERENCE/DOCKET NUMBER: 150.105WO1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-339-0331
TELEFAX: 612-339-3061
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 970 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
PCT-US95-06790-1

Query Match 76.7%; Score 540.4; DB 5; Length 970;
Best Local Similarity 91.1%; Pred. No. 5e-104;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

```
QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTCGCGG 60
DB 341 CCCAGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCGTCGCGG 400

QY 61 CGATCAAGAGTTCCTCGGCACCGACGCTGCCAGTTTCATGGACGAGCAACACCCCG 120
DB 401 CGATCAAGAGTTCCTCGGCACCGACGCTGCCAGTTTCATGGACGAGCAACACCCCG 460

QY 121 TGTCCGGGTCACCCACAGCGCGCTGTGCGCGCTGGCGCCGGTGTGTGTCTGCCGG 180
DB 461 TGTCCGGGTTGACCCACAGCGCGACTGTGCGCGCTGGCGCCGGTGTGTGTCTGCCGG 520

QY 181 AGCGGCGCGGCTGGAGGTCGCGGACGTCACCGCTCCCACTACGCGCGGATGTCGCCGA 240
DB 521 AGCGTCCGGGCTGGAGGTCGCGGACGTCACCGCTCCCACTACGCGCGGATGTCGCCGA 580

QY 241 TCAGACCCCGGAGGTCCTCGGCACCGACGCTGCCAGTTTCATGGACGAGCAACACCCCG 300
DB 581 TCAGAACCCCTGAGGGGCCAACATCGGCTCGCTGATCGGCTCGCTGTCGGTGTACGCGGG 640

QY 301 TCAACCCGTTCCGGTTCATCGAGACGCGCTACCGCAAGTGTGTGACGCGGTGGTCAACCG 360
DB 641 TCAACCCGTTCCGGTTCATCGAGAACGCGCTGTCGCGCGCTGGCGCCGGTGTGTGTACG 700

QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCCACGTCGTTGGTGGCGAGGCCAACT 420
```

Db 701 ACAGATCGTGTACTGACCGCGCAGAGAGGACCGCACCGTGTGGCAGAGGCAATT 760
 QY 421 CCGCGATCAGACAAAGGCGCGTTCGCGAGAGCGCGGTGCTGTGTCGCCCGCAAGGCGG 480
 Db 761 CCGCGATCGATGGGACGTTCGTCAGCGCGCGGTGCTGTGTCGCCCGCAAGGCGG 820
 QY 481 GCGAGTTCAGTACGTGCGCTCGTCGAGGTGGAATACATGACGTGTCGCCCGCAGA 540
 Db 821 GCGAGTTCAGTACGTGCGCTCGTCGAGGTGGAATACATGACGTGTCGCCCGCAGA 880
 QY 541 TGGTGTGCGTGGCCCGCGATGATCCCTTCTCGAGCAGCAGCGCAACCGTGCC 600
 Db 881 TGGTGTGCGTGGCCCGCGATGATCCCTTCTCGAGCAGCAGCGCAACCGTGCC 940
 QY 601 TGATGGCGCCCAACATGACGCGCGAGCGG 630
 Db 941 TCATGGGGCAACATGACGCGCGAGCGG 970

RESULT 8
 US-08-757-653-135
 ; Sequence 135, Application US/08757653
 ; Patent No. 5843669
 ; GENERAL INFORMATION:
 ; APPLICANT: Kaiser, Michael W.
 ; APPLICANT: Lyamichev, Victor I.
 ; APPLICANT: Lyamichev, Natasha
 ; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
 ; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
 ; NUMBER OF SEQUENCES: 190
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Medlen & Carroll, LLP
 ; STREET: 220 Montgomery Street, Suite 2200
 ; CITY: San Francisco
 ; STATE: California
 ; COUNTRY: United States Of America
 ; ZIP: 94104
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/757,653
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Ingolia, Diane E.
 ; REGISTRATION NUMBER: 40,027
 ; REFERENCE/DOCKET NUMBER: FORS-02565
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 705-8410
 ; TELEFAX: (415) 397-8338
 ; INFORMATION FOR SEQ ID NO: 135:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 620 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: double
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: DNA (genomic)
 ; US-08-757-653-135

Query Match 75.2%; Score 530.4; DB 2; Length 620;
 Best Local Similarity 91.0%; Pred. No. 5.8e-102;
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;
 QY 36 ATCAACATCGTCCAGTTCGTGGCGCGATCAAGAGTTCCTCGGCACCGCAGCTGTGCC 95
 Db 1 ATCAACATCGGCGCGTGTGGCGCGATCAAGAGTTCCTCGGCACCGCAGCTGTGAGC 60
 QY 96 CAGTTTCATGACCAAGACCAACCGCTGTGGGCTCACCCACAGCGCGCTGTGCGGCG 155
 Db 61 CAATTTCATGACCAAGACCAACCGCTGTGGGCTGTGACCCACAGCGCGCTGTGCGGCG 120

QY 156 CTGGCCCGCGGTGTCTGTCTCCGGAGCGGCGCGGCTGGAGTCCGCGACGTGACCCCG 215
 Db 121 CTGGCGCCCGCGGTGTCTGTCTACGTGAGCGTGC CGGGCTGGAGTCCGCGACGTGACCCCG 180
 QY 216 TCCCTACGCGCGGATGTCCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
 Db 181 TCGCTACGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
 QY 276 GGTCTGCTGTGCTGTATGCGCGGTCAACCGTTTCGGGTTTCATCGAGACGCGTACGCG 335
 Db 241 GGTCTGCTGTGCTGTATGCGCGGTCAACCGTTTCGGGTTTCATCGAAACGCGTACCGC 300
 QY 336 AAGTGTGTGCGAGCGGTGTCAACCGACGAGATCCACTACCTGACCGCGCAGAGGAGAC 395
 Db 301 AAGTGTGTGCGAGCGGTGTGAGCGACGAGATCGTGTACCTGACCGCGCAGAGGAGAC 360
 QY 396 CGCCACGTGTGTGCGCAGCGCAACTCGCGCGATCGACGACAGGGCGGTTCCGCGAGGCC 455
 Db 361 CGCCACGTGTGTGCGCAGCGCAACTCGCGCGATCGATCGAGCGGTTCGCTTCGTCGAGCGG 420
 QY 456 GCGGTGTGTGTCGCCCGCAAGCGCGGCGAGGTTCGAGTACGTGCCCTCGTCCGAGTGGAC 515
 Db 421 CGGTGTGTGTCGCCCGCAAGCGCGGCGAGGTTCGAGTACGTGCCCTCGTCCGAGTGGAC 480
 QY 516 TACATGGAGCTGTTCGCCCGCAGATGGTGTGGTGGCCACCGCGATGATCCCGTTCCTC 575
 Db 481 TACATGGAGCTGTTCGCCCGCAGATGGTGTGGTGGCCACCGCGATGATCCCGTTCCTC 540
 QY 576 GAGCAGCAGCAGCGCAACCGTGTGCTGATGGGCGCAACATGACGCGCGAGCGGTTCGG 635
 Db 541 GAGCAGCAGCAGCGCAACCGTGTGCTGATGGGCGCAACATGACGCGCGAGCGGTTCGG 600
 QY 636 CTGTGTGCGCAGCGAGCGGCC 655
 Db 601 CTGTGTGCGTAGCGAGGCCCC 620

RESULT 9
 US-08-757-653-138/c
 ; Sequence 138, Application US/08757653
 ; Patent No. 5843669
 ; GENERAL INFORMATION:
 ; APPLICANT: Kaiser, Michael W.
 ; APPLICANT: Lyamichev, Victor I.
 ; APPLICANT: Lyamichev, Natasha
 ; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
 ; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
 ; NUMBER OF SEQUENCES: 190
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Medlen & Carroll, LLP
 ; STREET: 220 Montgomery Street, Suite 2200
 ; CITY: San Francisco
 ; STATE: California
 ; COUNTRY: United States Of America
 ; ZIP: 94104
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/757,653
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Ingolia, Diane E.
 ; REGISTRATION NUMBER: 40,027
 ; REFERENCE/DOCKET NUMBER: FORS-02565
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 705-8410
 ; TELEFAX: (415) 397-8338
 ; INFORMATION FOR SEQ ID NO: 138:

```

; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match          75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGGCGGATCAAGAGTCTTCGGCCACGACGCTGTC 95
DB 620 ATCAACATCCGCGGTCGGCGGATCAAGAGTCTTCGGCCACGACGCTGAGC 561
QY 96 CAGTTCATGACACAGAACACCCGCTGTCCGGGCTCACCCACAGCGCCCTGTCCGGC 155
DB 560 CAATTCATGACACAGAACACCCGCTGTCCGGGTTGACCCACAGCGCGACTGTCCGGC 501
QY 156 CTGGGCCCGGTCGTCTCCGGGAGCGGCGGGCTGGAGTCCGGACGTCGACCCG 215
DB 500 CTGGGGCCCGCGGTCGTCTCACGTGACGCTGCCGGGCTGGAGTCCGGACGTCGACCCG 441
QY 216 TCCCACTACCGCGGATGTCGCCGATCGAGACCCCGAGGCTCCCAACATCGCTCTGATC 275
DB 440 TCCGACTACCGCGGATGTCGCCGATCGAACCCCTGAGGGGCCCAACATCGCTCTGATC 381
QY 276 GGCTCGCTGTCGGTGTATGCGCGGTCACCCGCTTCGGGTTTCATCGAGACGCGTACCCG 335
DB 380 GGCTCGCTGTCGGTGTATGCGCGGTCACCCGCTTCGGGTTTCATCGAACCGCGTACCCG 321
QY 336 AAGGTGTCAGCGGTCGTACCGAGAGATCCACTACTGACCGCGGACGAGGAGC 395
DB 320 AAGGTGTCAGCGGTCGTACCGAGAGATCCACTACTGACCGCGGACGAGGAGC 261
QY 396 CGCCAGTGTGGCGGAGGCGGCTCGCGATCGAGACAGGCGGCTTCGGGAGGCC 455
DB 260 CGCCAGTGTGGCGGAGGCGGCTTCGGGATCGATCGCGGACGCTTCGTCGAGCGG 201
QY 456 CGGGTGTGTCGCCCGCGGAGGCGGCTCGAGTACGTCGCTCGTCGAGGTGGAC 515
DB 200 CGCGTGTGTCGCCCGCGGAGGCGGCTCGAGTACGTCGCTCGTCGAGGTGGAC 141
QY 516 TACATGACGTCGCGCGGACAGATGTCGGTGGCCACCGCGATGATCCCGTTCCTC 575
DB 140 TACATGACGTCGCGCGGACAGATGTCGGTGGCCACCGCGATGATTCCTCTCCTG 81
QY 576 GAGCAGCAGACGCCACCGTCGCTGATGGCGGCCAACATGACGCGCGGCGGTCCG 635
DB 80 GAGCAGCAGACGCCACCGTCGCTGATGGCGGCCAACATGACGCGCGGCGGTCCG 21
QY 636 CTGGTCGCGAGCGAGCGCC 655
DB 20 CTGGTCGTCGAGCGGCC 1

RESULT 10
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 637424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA

```

```

; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

Query Match          75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGGCGGATCAAGAGTCTTCGGCCACGACGCTGTC 95
DB 1 ATCAACATCCGCGGTCGGTCGGCGATCAAGAGTCTTCGGCCACGACGCTGAGC 60
QY 96 CAGTTCATGACACAGAACACCCGCTGTCCGGGCTCACCCACAGCGCCCTGTCCGGC 155
DB 61 CAATTCATGACACAGAACACCCGCTGTCCGGGTTGACCCACAGCGCGACTGTCCGGC 120
QY 156 CTGGGCCCGGTCGTCTCCGGGAGCGGCGGGCTGGAGTCCGGACGTCGACCCG 215
DB 121 CTGGGGCCCGCGGTCGTCTCACGTGAGCGTCCGGGCTGGAGTCCGGACGTCGACCCG 180
QY 216 TCCCACTACCGCGGATGTCGCCGATCGAGACCCCGAGGTCCTCAACATCGCTCTGATC 275
DB 181 TCCCACTACCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGCTCTGATC 240
QY 276 GGTCTGCTGTCGTGTATCGCGGGTCAACCGGTTCCGGGTTTCATCGAGACGCGTACCCG 335
DB 241 GGTCTGCTGTCGTGTATCGCGGGTCAACCGGTTCCGGGTTTCATCGAAACGCGTACCCG 300
QY 336 AAGGTGTCGACGGCGTGTACCGACGAGATCCACTACTGACCCCGACGAGGAGC 395
DB 301 AAGGTGTCGACGGCGTGTAGCGACGAGATCGTGTACTGACCCCGACGAGGAGC 360
QY 396 CGCCAGTGTGGCGGAGCGGCTCGCGGATCGAGACAGGCGCGGTCGCGGAGCC 455
DB 361 CGCCAGTGTGGCGGAGCGGCTTCGCGGATCGATGCGGACGCTGCTTCGTCGAGCGC 420
QY 456 CGGGTGTGTCGCCCGCAAGCGCGGAGGTCGAGTACGTCGCTCGTCGAGGTGGAC 515
DB 421 CGGGTGTGTCGCCCGCAAGCGCGGAGGTCGAGTACGTCGCTCTGTCGAGGTGGAC 480
QY 516 TACATGACGTCGCGCGGCGGATGTCGGTGGCCACCGCGATGATCCCGTTCCTC 575
DB 481 TACATGACGTCGCGCGGCGGATGTCGGTGGCCACCGCGATGATTCCTCTCCTG 540
QY 576 GAGCAGCAGACGCCAACCGTGTGTCGGTGGCGGCCAATGACGAGCGCGGCTTCG 635
DB 541 GAGCAGCAGACGCCAACCGTGTGTCGGTGGCGGCCAATGACGAGCGCGGCTTCG 600
QY 636 CTGGTCGCGAGCGAGCGCC 655

```

Db 601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 11

US-08-520-946-138/c

; Sequence 138, Application US/08520946
; Patent No. 6372424

GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; NUMBER OF SEQUENCES: 160

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent In Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/520,946

; FILING DATE:

; CLASSIFICATION: 435

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

US-08-520-946-138

Query Match 75.2%; Score 530.4; DB 3; Length 620;

Best Local Similarity 91.0%; Pred. No. 5.8e-102;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTGGCGGCGATCAAGGAGTCTTCGGCACACGAGCTGTCC 95

Db 620 ATCAACATCCGCGGTGGTGGCGGCGATCAAGGAGTCTTCGGCACACGAGCTGTCC 561

QY 96 CAGTTCATGGACAGAACCCGCTGTGGGGCTCACCCACAAAGCGCGCTGTGGCG 155

Db 560 CAATTCATGACAGAACCCGCTGTGGGGTTGACCCACAAAGCGCGCTGTGGCG 501

QY 156 CTGGGCGCGGTGTCTGTCCGGGAGCGGGCGGGCTGGAGTCCGGACAGTGCACCG 215

Db 500 CTGGGCGCGGTGTCTGTACGCTGAGCGTGGCGGGCTGGAGTCCGGACAGTGCACCG 441

QY 216 TCCACTACGGCGGATGTCGGATCGAGACCCCGGAGGTCCTCAACATCGGTCTGATC 275

Db 440 TCGACTACGGCGGATGTCGGATCGAGACCCCTGAGGGGCCCAACATCGGTCTGATC 381

QY 276 GGCTCGCTGTGGTGTATGCGGGGTCAACCCGTTTCGGGTTCATCGAGACGCGGTACCG 335

Db 380 GGCTCGCTGTGGTGTATGCGGGGTCAACCCGTTTCGGGTTCATCGAGACGCGGTACCG 321

QY 336 AAGTGGTTCAGCGCGGTGTACCGACGAGATCACTACTGACCCCGCACGAGGAGGAC 395

Db 320 AAGTGGTTCAGCGCGGTGTACCGACGAGATCGTGTACTGTACCGCCCGCACGAGGAGGAC 261

QY 396 CGCCACGTGTGGCGCAGGCCAACCTCGCCGATCGACGACAAAGGCGCGGTTCGCGAGGCC 455
Db 260 CGCCACGTGTGGCGCAGGCCCAATTTCGCGGATCGATCGGACGGTTCGTCGAGCG 201
QY 456 CGGTGCTGTGGTCCCGCGCAAGCGCGGAGGTTCGAGTACGTCCTCTCGTCGAGGTGAC 515
Db 200 CGGTGCTGTGGTCCCGCGCAAGCGCGGAGGTTCGAGTACGTCCTCTCGTCGAGGTGAC 141
QY 516 TACATGGACGTGTGGCGCGCAGATGTGTGGTGGCCACGCGGATGATCCGTTCTTC 575
Db 140 TACATGGACGTGTGGCGCGCAGATGTGTGGTGGCCACGCGGATGATCCGTTCTTC 81
QY 576 GAGCACGACGACGCCCAACCGTCCCTGATGGCGCGCAACATCGACGCGCAGCGGTTCG 635
Db 80 GAGCACGACGACGCCCAACCGTCCCTCATGGGCGCAACATCGACGCGCAGCGGTTCG 21
QY 636 CTGGTGGCAGCGAGGCGCC 655
Db 20 CTGGTCCGTAGCGAGGCC 1

RESULT 12

US-09-655-378A-135

; Sequence 135, Application US/09655378A

; Patent No. 6673616

GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent In Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 135:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 135:

US-09-655-378A-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 5.8e-102;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTGGCGGCGATCAAGGAGTCTTCGGCACACGAGCTGTCC 95

Db 1 ATCAACATCCGCGGTGGTGGCGGCGATCAAGGAGTCTTCGGCACACGAGCTGTCC 60

```

QY 96 CAGTTTCATGACAGCAACACCGCTGTCTGGGGTCTACCCACAAGCGCCCTGTGGCG 155
Db 61 CAATTTCATGACAGCAACACCGCTGTCTGGGGTGTACCCACAAGCGCCCTGTGGCG 120
QY 156 CTGGGCGCGGGTGTCTGTCTGGGAGCGCGGCTGGAGGTTCGGACGTGCACCCG 215
Db 121 CTGGGCGCGGGTGTCTGTCTGGGAGCGGTGCGGGCTGGAGGTTCGGACGTGCACCCG 180
QY 216 TCCACTACGGCGGATGTCCCGATCGAAGACCCCGAGAGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGGCGGATGTCCCGATCGAAGACCCCTGAGGGGCGCAACATCGGTCTGATC 240
QY 276 GGCTCGCTGCTGGTATGCGGGTCAACCGCTTGGGTTTCATCGAGACCGCTACCGC 335
Db 241 GGCTCGCTGCTGGTATGCGGGTCAACCGCTTGGGTTTCATCGAAGACCGCTACCGC 300
QY 336 AAGTGTGTGACCGCGGTGTGACCGAGATCCACTTACCTGACCGCGGACGAGGAGGAC 395
Db 301 AAGTGTGTGACCGCGGTGTGACCGAGAGATCGTGTACTGACCGCGGACGAGGAGGAC 360
QY 396 CGCACGTGTGGCGAGGCAACTCGCCGATCGAAGACAAAGGGCGGGTTCGGGAGGCC 455
Db 361 CGCACGTGTGGCGAGGCAACTCGCCGATCGATCGGACGGTTCGTCGAGCGG 420
QY 456 CGGGTGTGTGCGCGCAGGGCGGCGAGGTGAGTACGTGCGCTCGTCCGAGGTGAC 515
Db 421 CGGGTGTGTGCGCGCAGGGCGGCGAGGTGAGTACGTGCGCTCGTCCGAGGTGAC 480
QY 516 TACATGACGTGTGCGCGCAGAGTGTGCTGGTGGCCACCGCGATGATCCCGTTCCCTC 575
Db 481 TACATGACGTGTGCGCGCAGAGTGTGCTGGTGGCCACCGCGATGATTCCTTCCTG 540
QY 576 GAGCAGACGACGCCAACCGTGCCTGATGGGGCGCAACATGACGCGCCAGGGGTCGCG 635
Db 541 GAGCAGACGACGCCAACCGTGCCTCATGGGGCGCAACATGACGCGCCAGGGGTCGCG 600
QY 636 CTGGTGGCAGCGAGGGCC 655
Db 601 CTGGTGGCAGCGAGGGCC 620

```

RESULT 13

US-09-655-378A-138/c

; Sequence 138, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; LYAMICHEV, VICTOR I.

; OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 138:

US-09-655-378A-138

```

Query Match      75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCCAGTCTGTGGCGGATCAAGAGAGTTCTTCGGCACACGACGCTGTCC 95
Db 620 ATCAACATCCGTCCAGTCTGTGGCGGATCAAGAGAGTTCTTCGGCACACGACGCTGTCC 561
QY 96 CAGTTTCATGACAGCAACACCGCTGTCTGGGCTCACCCACAAGCGCCCTGTGGCG 155
Db 560 CAAATTCATGACAGCAACACCGCTGTCTGGGTTGACCCACAAGCGCGACTGTGGCG 501
QY 156 CTGGGCGCGGGTGTCTGTCTCCGGAGCGGGCGGGCTGGAGTCCGCGACGTGCACCCG 215
Db 500 CTGGGCGCGGGTGTCTGTCTAGTGTGCGGTGCGGGCTGGAGTCCGCGACGTGCACCCG 441
QY 216 TCCCACTACGGCGGATGTCGCGGATCGAGACCCCGAGGTCCTCAACATCGGTCTGATC 275
Db 440 TCGCACTACGGCGGATGTCGCGGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381
QY 276 GGCTCGCTCTGGTGTATGCGGGGTCAACCCGTTTCGGGTTTCATCGAGACGCCGTACCCG 335
Db 380 GGCTCGCTCTGGTGTATGCGGGGTCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCCG 321
QY 336 AAGTGTGTGACGGCGTGTCTACCGACGAGATCCACTACTGACCCCGACGAGGAGGAC 395
Db 320 AAGTGTGTGACGGCGTGTCTAGCGACGAGATCGTGTACCTGACCCCGACGAGGAGGAC 261
QY 396 CGCCAGTGTGTGGCGAGGCCAACTCGCCGATCGAGCAACAAGGGCGGTTTCGGCGAGGCC 455
Db 260 CGCCAGTGTGTGGCGAGGCCAACTTCGCCGATCGATCGGACGCTCGCTTCGTCGAGCCG 201
QY 456 CGGGTGTCTGGTCCGCGCAAGCGCGGCGAGGTCTGAGTACGTGCGCTCTCGTCCGAGGTGAC 515
Db 200 CGGGTGTCTGGTCCGCGCAAGCGCGGCGAGGTGGAGTACGTGCCCTCTGTCTGAGTGGAC 141
QY 516 TACATGGACGTGTCTGCGCGCGCAGATGTGTCTGGTGGCCACCGCGATGATTCGGTTCTTC 575
Db 140 TACATGGACGTGTCTGCGCGCGCAGATGTGTCTGGTGGCCACCGCGATGATTCCTTCTCTG 81
QY 576 GAGCAGACGACGCCAACCGTGCCTTCATGGGGCGCAACATGACGAGCGCGAGGGTTCGCG 635
Db 80 GAGCAGACGACGCCAACCGTGCCTTCATGGGGCGCAACATGACGAGCGCGAGGGTTCGCG 21
QY 636 CTGGTGGCAGCGAGGGCC 655
Db 20 CTGGTGGCAGCGAGGGCC 1

```

RESULT 14

US-08-757-653-136

; Sequence 136, Application US/08757653

; Patent No. 5843669

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190

```

CORRESPONDENCE ADDRESS:
ADDRESSEE: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 136:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-136

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 1.3e-101;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCCGCGCGATCAAGAGGTTCTTCGGACACAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGCGTGTCCGCGGATCAAGAGGTTCTTCGGACACAGCCAGCTGAGC 60
QY 96 CAGTTTCATGGACAGAACACCGCTGTTCGGGGTCAACCAAGCGCGCTGTTCGGCG 155
DB 61 CAATTTCATGGACAGAACACCGCTGTTCGGGGTTCACCTAAGCGCGCTGTTCGGCG 120
QY 156 CTGGGCGCGGCTGTTCGCGGAGCGGGCTGGAGGTCGGACAGCTGTTCGGCG 215
DB 121 CTGGGCGCGGCTGTTCGCTACGTCAGGCTGCGGGCTGGAGGTCGGACAGCTGTTCGGCG 180
QY 216 TCCCACTACGCGCGATGTCGCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGATGTCGCCGATCGAAACCCCTGAGGGCCCAACATCGGTCTGATC 240
QY 276 GGTCTGCTCGGTGTATCGCGGGTCAACCCGTTTCGGGTTTCATCGAGACCGCTGACCGC 335
DB 241 GGTCTGCTCGGTGTATCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACCGCTGACCGC 300
QY 336 AAGTGTGTACGGGCTGTTCACCGACAGATCCACTCCTCACCGCGCGAGGAGGAC 395
DB 301 AAGTGTGTACGGGCTGTTCAGCGACGAGATCGTGTACTTACCGCGCGAGGAGGAC 360
QY 396 CGCCACGTGTGTGCGCGAGCGCAACTCGCGGATCGACGACAAAGGGCGGTTTCGCGGAGGCG 455
DB 361 CGCCACGTGTGTGCGACAGCGCAATTCGCCGATCGATGCGGACGCTTCGTCGAGCGC 420
QY 456 CGGGTGTCTGCTCGCGCGCGAGGCTGAGTACGTGCTTCGTCGAGGTCGAGGAC 515
DB 421 CGCGTGTCTGCTCGCGCGCGAGGCTGAGTACGTGCTTCGTCGAGGTCGAGGAC 480
QY 516 TACATGAGCTGTTCGCGCGCGAGATGCTGCTGGTGGCCACCGCATGATCCGTTCTTC 575
DB 481 TACATGAGCTGTTCGCGCGCGAGATGCTGCTGGTGGCCACCGCATGATCCGTTCTTC 540
QY 576 GAGCAGCAGCGACCGCAACCGTGTCCCTGATGGGGCGCCCAACATGACGAGCGCGGTTCCG 635

```

```

DB 541 GAGCAGCAGCGACGCCAACCGTGCCTCATGGGGCAACATGACGCGCCAGCGGTGCCG 600
QY 636 CTGGTGGCGCAGCGAGGCGCC 655
DB 601 CTGGTCCGTAGCGAGGCGCC 620

RESULT 15
US-08-757-653-137
Sequence 137, Application US/08757653
Patent No. 5843669
GENERAL INFORMATION:
APPLICANT: Kaiser, Michael W.
APPLICANT: Lyamichev, Natasha I.
APPLICANT: Lyamichev, Natasha I.
TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
NUMBER OF SEQUENCES: 190
CORRESPONDENCE ADDRESS:
ADDRESSEE: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 137:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-137

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 1.3e-101;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCCGCGCGATCAAGAGGTTCTTCGGACACAGCCAGCTGTCC 95
DB 1 ATCAACATCCGCGCGTGTCCGCGGATCAAGAGGTTCTTCGGACACAGCCAGCTGAGC 60
QY 96 CAGTTTCATGGACAGAACACCGCTGTTCGGGGTCAACCAAGCGCGCTGTTCGGCG 155
DB 61 CAATTTCATGGACAGAACACCGCTGTTCGGGGTTCACCTAAGCGCGCTGTTCGGCG 120
QY 156 CTGGGCGCGGCTGTTCGCGGAGCGGGCTGGAGGTCGGACAGCTGTTCGGCG 215
DB 121 CTGGGCGCGGCTGTTCGCTACGTCAGGCTGCGGGCTGGAGGTCGGACAGCTGTTCGGCG 180
QY 216 TCCCACTACGCGCGATGTCGCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGATGTCGCCGATCGAAACCCCTGAGGGCCCAACATCGGTCTGATC 240
QY 276 GGTCTGCTCGGTGTATCGCGGGTCAACCCGTTTCGGGTTTCATCGAGACCGCTGACCGC 335

```


Db	241	GGCTCGCTGTCGGTGTACGCGCGGTCAACCCGTTGCGGTTTCATCGAAACGCCGTACCCG	300
Qy	336	AAGGTGGTCCACGGCGTGGTCAACGACGAGATCCACTACCTGACCGCCGACGAGGAGGAC	395
Db	301	AAGGTGGTCCACGGCGTGGTGTAGCGACGAGATCGTGTACCTGACCGCCGACGAGGAGGAC	360
Qy	396	CGCCACGTGGTGGCGCAGGCGCAACTCGCCGATCGACGACAAAGGCGCGGTTTCGCGGAGGCC	455
Db	361	CGCCACGTGGTGGCACAGGCGCAATTGCCCCGATCGATCGGACCGTTCGTTTCGTCGAGCCG	420
Qy	456	CGGTTGCTGTTCCGCGCGCAAGGCGGCGAGGTGAGTACGTGCCCTCGTCCGAGGTGGAC	515
Db	421	CGCGTGTGTTCCGCGCGCAAGGCGGCGAGGTGAGTACGTGCCCTCGTCTCTGAGGTGGAC	480
Qy	516	TACATGACGTGTGTCGCGCGCCAGATGGTGTGCGTGGCCACCGCGATGATCCCGTTTCCTC	575
Db	481	TACATGACGTGTGTCGCGCGCCAGATGGTGTGCGTGGCCACCGCGATGATTCCTTTCCTG	540
Qy	576	GAGCAGCAGCAGCCCAACCGTGCCTGATGGGCGCCAAATGACAGCGCCAGGCGGTTCCG	635
Db	541	GAGCAGCAGCAGCCCAACCGTGCCTCATGGGGGCAAAATGACAGCGCCAGGCGGTTCCG	600
Qy	636	CTGTTGCGCAGCGAGGCGCC	655
Db	601	CTGTTGCGTACGAGGCCCC	620

Search completed: August 24, 2005, 22:25:09
Job time : 114.459 secs

This Page Blank (uspio)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model
Run on: August 24, 2005, 21:58:55 ; Search time 451.661 Seconds
(without alignments)
10213.139 Million cell updates/sec

Title: US-09-285-306-8
Perfect score: 705
Sequence: 1 ccagagcgtgagcgatc.....ggcgatcgagcggaagcgt 705

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 1.0

Searched: 7331713 seqs, 3271544945 residues

Total number of hits satisfying chosen parameters: 14663426

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications NA:
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:
2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:
3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:
4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:
5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:
6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:
7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:
8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:
9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:
10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:
11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:
12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:
13: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:
14: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:
15: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:
16: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq:
17: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:
18: /cgn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq:
19: /cgn2_6/ptodata/1/pubpna/US10G_PUBCOMB.seq:
20: /cgn2_6/ptodata/1/pubpna/US10H_PUBCOMB.seq:
21: /cgn2_6/ptodata/1/pubpna/US10I_PUBCOMB.seq:
22: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:
23: /cgn2_6/ptodata/1/pubpna/US11A_PUBCOMB.seq:
24: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq:
25: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:
26: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	705	100.0	705	US-09-285-306-4	Sequence 4, Appli
2	705	100.0	705	US-09-285-306-5	Sequence 5, Appli
3	705	100.0	705	US-09-285-306-6	Sequence 6, Appli
4	705	100.0	705	US-09-285-306-7	Sequence 7, Appli
5	705	100.0	705	US-09-285-306-8	Sequence 8, Appli
6	705	100.0	705	US-09-285-306-9	Sequence 9, Appli
7	705	100.0	705	US-09-285-306-12	Sequence 12, Appli

8	705	100.0	705	US-09-285-306-13	Sequence 13, Appli
9	705	100.0	705	US-09-285-306-14	Sequence 14, Appli
10	705	100.0	705	US-09-285-306-16	Sequence 16, Appli
11	705	100.0	705	US-09-285-306-24	Sequence 24, Appli
12	703.4	99.8	705	US-09-285-306-17	Sequence 17, Appli
13	695	98.6	705	US-09-285-306-3	Sequence 3, Appli
14	693.4	98.4	705	US-09-285-306-11	Sequence 11, Appli
15	691	98.0	705	US-09-285-306-10	Sequence 10, Appli
16	691	98.0	3444	US-10-282-122A-25737	Sequence 25737, A
17	687	97.4	687	US-09-285-306-18	Sequence 18, Appli
18	687	97.4	687	US-09-285-306-19	Sequence 19, Appli
19	687	97.4	687	US-09-285-306-20	Sequence 20, Appli
20	687	97.4	687	US-09-285-306-21	Sequence 21, Appli
21	687	97.4	687	US-09-285-306-22	Sequence 22, Appli
22	687	97.4	687	US-09-285-306-23	Sequence 23, Appli
23	687	97.4	687	US-09-285-306-25	Sequence 25, Appli
24	687	97.4	687	US-09-285-306-27	Sequence 27, Appli
25	660.2	93.6	705	US-09-285-306-143	Sequence 143, App
26	658.6	93.4	705	US-09-285-306-144	Sequence 144, App
27	655.4	93.0	705	US-09-285-306-87	Sequence 87, Appli
28	655.4	93.0	705	US-09-285-306-88	Sequence 88, Appli
29	655.4	93.0	705	US-09-285-306-90	Sequence 90, Appli
30	655.4	93.0	705	US-09-285-306-92	Sequence 92, Appli
31	655.4	93.0	705	US-09-285-306-96	Sequence 96, Appli
32	653.8	92.7	705	US-09-285-306-84	Sequence 84, Appli
33	653.8	92.7	705	US-09-285-306-86	Sequence 86, Appli
34	653.8	92.7	705	US-09-285-306-93	Sequence 93, Appli
35	653.8	92.7	705	US-09-285-306-94	Sequence 94, Appli
36	653.8	92.7	705	US-09-285-306-95	Sequence 95, Appli
37	652.2	92.5	705	US-09-285-306-85	Sequence 85, Appli
38	652.2	92.5	705	US-09-285-306-89	Sequence 89, Appli
39	652.2	92.5	705	US-09-285-306-91	Sequence 91, Appli
40	652.2	92.5	705	US-09-285-306-146	Sequence 146, App
41	642.2	91.1	687	US-09-285-306-181	Sequence 181, App
42	642.2	91.1	687	US-09-285-306-148	Sequence 148, App
43	637.4	90.4	687	US-09-285-306-100	Sequence 100, App
44	635.8	90.2	687	US-09-285-306-99	Sequence 99, Appli
45	635.8	90.2	687	US-09-285-306-145	Sequence 145, App

ALIGNMENTS

RESULT 1
US-09-285-306-4
; Sequence 4, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-4

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCCAGGACGTGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGCGG 60
DB 1 CCCAGGACGTGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGCGG 60

QY 61 CGATCAAGAGTTCTTTCCGACACAGCCAGCTGTCACAGTTTCATGGACCAAGAAACAACCCGC 120
Db |||||
61 CGATCAAGAGTTCTTTCCGACACAGCCAGCTGTCACAGTTTCATGGACCAAGAAACAACCCGC 120
QY 121 TGTTCGGGGTCAACCAAGCCGCTGTTCGGCGTTCGGCGTTCGGCGTTCGGCGTTCGGCGTTCGGCG 180
Db |||||
121 TGTTCGGGGTCAACCAAGCCGCTGTTCGGCGTTCGGCGTTCGGCGTTCGGCGTTCGGCGTTCGGCG 180
QY 181 AGCGGCGCGGGTTCGAGGTCGCGAGCTGCACCCGTCACCTACGCGCGGATGTGCCGA 240
Db |||||
181 AGCGGCGCGGGTTCGAGGTCGCGAGCTGCACCCGTCACCTACGCGCGGATGTGCCGA 240
QY 241 TCAGACCCCGAGGGTCCCAACATCGGTCATCGGCTCGTGTTCGGTTCGGTTCGGTTCGGTTCGGTTCGG 300
Db |||||
241 TCAGACCCCGAGGGTCCCAACATCGGTCATCGGCTCGTGTTCGGTTCGGTTCGGTTCGGTTCGGTTCGG 300
QY 301 TCACCCCGTTCGGTTCATCGAGACCGCTACCGCAAGGTGTCGACGGCGGTTCACCG 360
Db |||||
301 TCACCCCGTTCGGTTCATCGAGACCGCTACCGCAAGGTGTCGACGGCGGTTCACCG 360
QY 361 ACAGATCCACTACCTGACCGCGAGAGGACCGCCACCGTGGTGGCGCAGGCCAACT 420
Db |||||
361 ACAGATCCACTACCTGACCGCGAGAGGACCGCCACCGTGGTGGCGCAGGCCAACT 420
QY 421 CGCCGATCGACGAAGGCGCGTTCGCGAGGCGCGGTCGCGTTCGCGTTCGCGTTCGCGTTCGCGTTCGCG 480
Db |||||
421 CGCCGATCGACGAAGGCGCGTTCGCGAGGCGCGGTCGCGTTCGCGTTCGCGTTCGCGTTCGCGTTCGCG 480
QY 481 GCGAGTCCGATGACGTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGG 540
Db |||||
481 GCGAGTCCGATGACGTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGG 540
QY 541 TGGTGTTCGCGTTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGG 600
Db |||||
541 TGGTGTTCGCGTTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGG 600
QY 601 TGATGGCGCCAAACATGACGCGCGAGCGGTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGG 660
Db |||||
601 TGATGGCGCCAAACATGACGCGCGAGCGGTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGG 660
QY 661 TGGGCAACCGCATGAGCTGCGCGCGCGCATGACGCGCGGCGAGCT 705
Db |||||
661 TGGGCAACCGCATGAGCTGCGCGCGCGCATGACGCGCGGCGAGCT 705

RESULT 2
US-09-285-306-5
; Sequence 5, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 5
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-5

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGCGATCACCCGACACCTGATCAACATCCGTCAGTCCGTCGTCGCGG 60
|||

Db 1 CCCAGACGTGGAGCGATCACCCGACACCTGATCAACATCCGTCAGTCCGTCGTCGCGG 60
QY 61 CGATCAAGAGTTCTTTCCGACACAGCCAGCTGTCACAGTTTCATGGACCAAGAAACAACCCGC 120
Db |||||
61 CGATCAAGAGTTCTTTCCGACACAGCCAGCTGTCACAGTTTCATGGACCAAGAAACAACCCGC 120
QY 121 TGTTCGGGGTCAACCAAGCCGCTGTTCGGCGTTCGGCGTTCGGCGTTCGGCGTTCGGCGTTCGGCG 180
Db |||||
121 TGTTCGGGGTCAACCAAGCCGCTGTTCGGCGTTCGGCGTTCGGCGTTCGGCGTTCGGCGTTCGGCG 180
QY 181 AGCGGCGCGGGTTCGAGGTCGCGAGCTGCACCCGTCACCTACGCGCGGATGTGCCGA 240
Db |||||
181 AGCGGCGCGGGTTCGAGGTCGCGAGCTGCACCCGTCACCTACGCGCGGATGTGCCGA 240
QY 241 TCAGACCCCGAGGGTCCCAACATCGGTCATCGGCTCGTGTTCGGTTCGGTTCGGTTCGGTTCGGTTCGG 300
Db |||||
241 TCAGACCCCGAGGGTCCCAACATCGGTCATCGGCTCGTGTTCGGTTCGGTTCGGTTCGGTTCGGTTCGG 300
QY 301 TCACCCCGTTCGGTTCATCGAGACCGCTACCGCAAGGTGTCGACGGCGGTTCACCG 360
Db |||||
301 TCACCCCGTTCGGTTCATCGAGACCGCTACCGCAAGGTGTCGACGGCGGTTCACCG 360
QY 361 ACAGATCCACTACCTGACCGCGAGAGGACCGCCACCGTGGTGGCGCAGGCCAACT 420
Db |||||
361 ACAGATCCACTACCTGACCGCGAGAGGACCGCCACCGTGGTGGCGCAGGCCAACT 420
QY 421 CGCCGATCGACGAAGGCGCGTTCGCGAGGCGCGGTCGCGTTCGCGTTCGCGTTCGCGTTCGCGTTCGCG 480
Db |||||
421 CGCCGATCGACGAAGGCGCGTTCGCGAGGCGCGGTCGCGTTCGCGTTCGCGTTCGCGTTCGCGTTCGCG 480
QY 481 GCGAGTCCGATGACGTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGG 540
Db |||||
481 GCGAGTCCGATGACGTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGG 540
QY 541 TGGTGTTCGCGTTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGG 600
Db |||||
541 TGGTGTTCGCGTTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGG 600
QY 601 TGATGGCGCCAAACATGACGCGCGAGCGGTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGG 660
Db |||||
601 TGATGGCGCCAAACATGACGCGCGAGCGGTCGCGTTCGCGAGGTCGCGTTCGCGAGGTCGCGTTCGCGAGG 660
QY 661 TGGGCAACCGCATGAGCTGCGCGCGCGCATGACGCGCGGCGAGCT 705
Db |||||
661 TGGGCAACCGCATGAGCTGCGCGCGCGCATGACGCGCGGCGAGCT 705

RESULT 3
US-09-285-306-6
; Sequence 6, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-6

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGCGATCACCCGACACCTGATCAACATCCGTCAGTCCGTCGTCGCGG 60
|||

```

QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCCGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCCGTGGCGG 60
QY 61 CGATCAAGAGTTCTTTCGGCACCGACGAGCTGTCCAGTTTCATGGACCAACAAACCCGC 120
Db 61 CGATCAAGAGTTCTTTCGGCACCGACGAGCTGTCCAGTTTCATGGACCAACAAACCCGC 120
QY 121 TGTCCGGGCTCACCCCAAGGCGGCTGTCCGGGCTGGGCGCGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCCAAGGCGGCTGTCCGGGCTGGGCGCGGTGGTCTGTCCCGGG 180
QY 181 AGCGGGCCGGGCTGGAGGTCCCGGACGTCGACCCCTCCCACTACGGCCGGATGTGCCCGA 240
Db 181 AGCGGGCCGGGCTGGAGGTCCCGGACGTCGACCCCTCCCACTACGGCCGGATGTGCCCGA 240
QY 241 TCAGACCCCGGAGGTTCCAAATCGTCTGATCGGCTCGCTGTCCGTTGATGCGGCGG 300
Db 241 TCAGACCCCGGAGGTTCCAAATCGTCTGATCGGCTCGCTGTCCGTTGATGCGGCGG 300
QY 301 TCAACCGGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTGGCGGCTGGTCAACG 360
Db 301 TCAACCGGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTGGCGGCTGGTCAACG 360
QY 361 ACAGATCCACTACTACCTGACCGCGGACGAGGAGGACCGCCACGTTGGTGGCGGCAACT 420
Db 361 ACAGATCCACTACTACCTGACCGCGGACGAGGAGGACCGCCACGTTGGTGGCGGCAACT 420
QY 421 CGCGGATCGACGACAAAGGCGGTTTCGGGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480
Db 421 CGCGGATCGACGACAAAGGCGGTTTCGGGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480
QY 481 GCGAGTTCGATGAGTCCCTCGTCCGAGGTGGACTACATGAGAGTGTGGCGCGGCGAGA 540
Db 481 GCGAGTTCGATGAGTCCCTCGTCCGAGGTGGACTACATGAGAGTGTGGCGCGGCGAGA 540
QY 541 TGTGTCTGGTGGCGGACGCGGATGATCCGTTCTCGAGGACGACGCGCAACCGTGGCC 600
Db 541 TGTGTCTGGTGGCGGACGCGGATGATCCGTTCTCGAGGACGACGCGCAACCGTGGCC 600
QY 601 TGATGGCGGCAACATGACGCGGCGGTTCCGCTGGTGGCGAGGCGCGGCTGG 660
Db 601 TGATGGCGGCAACATGACGCGGCGGTTCCGCTGGTGGCGAGGCGCGGCTGG 660
QY 661 TGGGCAACCGCATGGAGTTCGCGCGCGGATCGACGCGGCGAGCT 705
Db 661 TGGGCAACCGCATGGAGTTCGCGCGCGGATCGACGCGGCGAGCT 705

```

RESULT 4

```

US-09-285-306-7
; Sequence 7, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-7

```

Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 8.2e-156;

```

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCCGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCCGTGGCGG 60
QY 61 CGATCAAGAGTTCTTTCGGCACCGACGAGCTGTCCAGTTTCATGGACCAACAAACCCGC 120
Db 61 CGATCAAGAGTTCTTTCGGCACCGACGAGCTGTCCAGTTTCATGGACCAACAAACCCGC 120
QY 121 TGTCCGGGCTCACCCCAAGGCGGCTGTCCGGGCTGGGCGCGGTGGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCCAAGGCGGCTGTCCGGGCTGGGCGCGGTGGTCTGTCCCGGG 180
QY 181 AGCGGGCCGGGCTGGAGGTCCCGGACGTCGACCCCTCCCACTACGGCCGGATGTGCCCGA 240
Db 181 AGCGGGCCGGGCTGGAGGTCCCGGACGTCGACCCCTCCCACTACGGCCGGATGTGCCCGA 240
QY 241 TCAGACCCCGGAGGTTCCAAATCGTCTGATCGGCTCGCTGTCCGTTGATGCGGCGG 300
Db 241 TCAGACCCCGGAGGTTCCAAATCGTCTGATCGGCTCGCTGTCCGTTGATGCGGCGG 300
QY 301 TCAACCGGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTGGCGGCTGGTCAACG 360
Db 301 TCAACCGGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTGGCGGCTGGTCAACG 360
QY 361 ACAGATCCACTACTACCTGACCGCGGACGAGGAGGACCGCCACGTTGGTGGCGGCAACT 420
Db 361 ACAGATCCACTACTACCTGACCGCGGACGAGGAGGACCGCCACGTTGGTGGCGGCAACT 420
QY 421 CGCGGATCGACGACAAAGGCGGTTTCGGGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480
Db 421 CGCGGATCGACGACAAAGGCGGTTTCGGGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480
QY 481 GCGAGTTCGATGAGTCCCTCGTCCGAGGTGGACTACATGAGAGTGTGGCGCGGCGAGA 540
Db 481 GCGAGTTCGATGAGTCCCTCGTCCGAGGTGGACTACATGAGAGTGTGGCGCGGCGAGA 540
QY 541 TGTGTCTGGTGGCGGACGCGGATGATCCGTTCTCGAGGACGACGCGCAACCGTGGCC 600
Db 541 TGTGTCTGGTGGCGGACGCGGATGATCCGTTCTCGAGGACGACGCGCAACCGTGGCC 600
QY 601 TGATGGCGGCAACATGACGCGGCGGTTCCGCTGGTGGCGAGGCGCGGCTGG 660
Db 601 TGATGGCGGCAACATGACGCGGCGGTTCCGCTGGTGGCGAGGCGCGGCTGG 660
QY 661 TGGGCAACCGCATGGAGTTCGCGCGCGGATCGACGCGGCGAGCT 705
Db 661 TGGGCAACCGCATGGAGTTCGCGCGCGGATCGACGCGGCGAGCT 705

```

RESULT 5

```

US-09-285-306-8
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-8

```

```
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGCGATCACACGCGACACCTGATCAACATCCGTCCAGTCGTGGCG 60
Db 1 CCCAGACGTGGAGCGATCACACGCGACACCTGATCAACATCCGTCCAGTCGTGGCG 60

QY 61 CGATCAAGAGTCTTTCGGCACCGACGAGTGTCCAGTTCATGACACGAAACACCCGC 120
Db 61 CGATCAAGAGTCTTTCGGCACCGACGAGTGTCCAGTTCATGACACGAAACACCCGC 120

QY 121 TGTGGGGCTCACCCACAAGCGCCGCTGTGCGCGCTGGGCCGGGTGTCTGTCCCGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCCGCTGTGCGCGCTGGGCCGGGTGTCTGTCCCGG 180

QY 181 AGCGGGCCGGGTGGAGGTCGCGAGTGCACCGTCCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGGCCGGGTGGAGGTCGCGAGTGCACCGTCCCACTACGCGCGGATGTGCCGA 240

QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGTGTCCGTGTATGGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGTGTCCGTGTATGGCGGG 300

QY 301 TCAACCCGTTCCGGTTCATCGAGACGCGCTACCGAAGGTGGTTCGACGCGGTGGTCA 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACGCGCTACCGAAGGTGGTTCGACGCGGTGGTCA 360

QY 361 ACGAGATCCACTACCTGACCGCGGAGGACCGCAAGTGGTGGCGGAGGCGCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGGAGGACCGCAAGTGGTGGCGGAGGCGCAACT 420

QY 421 CGCCGATCGACGACAAAGGCGCGGTTCGCGAGGCGCGGTGTGGTCCGCCAAGGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGGTTCGCGAGGCGCGGTGTGGTCCGCCAAGGCGG 480

QY 481 GCGAGTTCGAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGCTGTCCGCGCGCAGA 540
Db 481 GCGAGTTCGAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGCTGTCCGCGCGCAGA 540

QY 541 TGGTTCGCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCGCAACCGTGCCC 600
Db 541 TGGTTCGCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCGCAACCGTGCCC 600

QY 601 TGATGGGCGCCAACTATGACGCGCCAGGCGGTTCGCGTGGTGGCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAACTATGACGCGCCAGGCGGTTCGCGTGGTGGCGAGGCGCGCTGG 660

QY 661 TGGGCACCGGCATGGAGTTCGCGCGCGGATCGACGCGCGGACGT 705
Db 661 TGGGCACCGGCATGGAGTTCGCGCGCGGATCGACGCGCGGACGT 705
```

```
RESULT 6
US-09-285-306-9
; Sequence 9, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER APPLICATION NUMBER: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 9
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
```

```
US-09-285-306-9

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGCGATCACACGCGACACCTGATCAACATCCGTCCAGTCGTGGCG 60
Db 1 CCCAGACGTGGAGCGATCACACGCGACACCTGATCAACATCCGTCCAGTCGTGGCG 60

QY 61 CGATCAAGAGTCTTTCGGCACCGACGAGTGTCCAGTTCATGACACGAAACACCCGC 120
Db 61 CGATCAAGAGTCTTTCGGCACCGACGAGTGTCCAGTTCATGACACGAAACACCCGC 120

QY 121 TGTGGGGCTCACCCACAAGCGCCGCTGTGCGCGCTGGGCCGGGTGTCTGTCCCGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCCGCTGTGCGCGCTGGGCCGGGTGTCTGTCCCGG 180

QY 181 AGCGGGCCGGGTGGAGGTCGCGAGTGCACCGTCCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGGCCGGGTGGAGGTCGCGAGTGCACCGTCCCACTACGCGCGGATGTGCCGA 240

QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGTGTCCGTGTATGGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGTGTCCGTGTATGGCGGG 300

QY 301 TCAACCCGTTCCGGTTCATCGAGACGCGCTACCGAAGGTGGTTCGACGCGGTGGTCA 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACGCGCTACCGAAGGTGGTTCGACGCGGTGGTCA 360

QY 361 ACGAGATCCACTACCTGACCGCGGAGGACCGCAAGTGGTGGCGGAGGCGCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGGAGGACCGCAAGTGGTGGCGGAGGCGCAACT 420

QY 421 CGCCGATCGACGACAAAGGCGCGGTTCGCGAGGCGCGGTGTGGTCCGCCAAGGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGGTTCGCGAGGCGCGGTGTGGTCCGCCAAGGCGG 480

QY 481 GCGAGTTCGAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGCTGTCCGCGCGCAGA 540
Db 481 GCGAGTTCGAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGCTGTCCGCGCGCAGA 540

QY 541 TGGTTCGCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCGCAACCGTGCCC 600
Db 541 TGGTTCGCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCGCAACCGTGCCC 600

QY 601 TGATGGGCGCCAACTATGACGCGCCAGGCGGTTCGCGTGGTGGCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAACTATGACGCGCCAGGCGGTTCGCGTGGTGGCGAGGCGCGCTGG 660

QY 661 TGGGCACCGGCATGGAGTTCGCGCGCGGATCGACGCGCGGACGT 705
Db 661 TGGGCACCGGCATGGAGTTCGCGCGCGGATCGACGCGCGGACGT 705
```

```
RESULT 7
US-09-285-306-12
; Sequence 12, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER APPLICATION NUMBER: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 705
```

```

; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-12

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
Db |||||
Qy 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
Db |||||
Qy 61 CGATCAAGGAGTCTTCCGCAACACGACGCTGTCCAGTTCATGGACCAACAAACCCCG 120
Db |||||
Qy 61 CGATCAAGGAGTCTTCCGCAACACGACGCTGTCCAGTTCATGGACCAACAAACCCCG 120
Db |||||
Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTGGCGCTGGCGCGCGGTGTCTGTCCCGGG 180
Db |||||
Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTGGCGCTGGCGCGCGGTGTCTGTCCCGGG 180
Db |||||
Qy 181 AGCGGGCGGGCTGGAGGTCCGGAAGTGCACACCGCTCCCACTACGGCCGGATGTGCCCGA 240
Db |||||
Qy 181 AGCGGGCGGGCTGGAGGTCCGGAAGTGCACACCGCTCCCACTACGGCCGGATGTGCCCGA 240
Db |||||
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCCGGG 300
Db |||||
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCCGGG 300
Db |||||
Qy 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGCGTGGTCAACG 360
Db |||||
Qy 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGCGTGGTCAACG 360
Db |||||
Qy 361 ACAGATTCCTACCTGACCCGCAAGAGGACCGCCACGTCGTTGGTGGCGACGGCCAACT 420
Db |||||
Qy 361 ACAGATTCCTACCTGACCCGCAAGAGGACCGCCACGTCGTTGGTGGCGACGGCCAACT 420
Db |||||
Qy 421 CGCGGATCGAGACACAGGGCGGTTCGCGAGGCGCGGTTCGCGAGGCGCGGTTCGCGAGGCGG 480
Db |||||
Qy 421 CGCGGATCGAGACACAGGGCGGTTCGCGAGGCGCGGTTCGCGAGGCGCGGTTCGCGAGGCGG 480
Db |||||
Qy 481 GCGAGTTCGAGTACGTGCGCTTCGCGAGGCGCGGTTCGCGAGGCGCGGTTCGCGAGGCGCGG 540
Db |||||
Qy 481 GCGAGTTCGAGTACGTGCGCTTCGCGAGGCGCGGTTCGCGAGGCGCGGTTCGCGAGGCGCGG 540
Db |||||
Qy 541 TGTGTCTGTGGCCACCGCGATGATCCGTTCTCTCGAGCACGACGACGACGACGACGACGACG 600
Db |||||
Qy 541 TGTGTCTGTGGCCACCGCGATGATCCGTTCTCTCGAGCACGACGACGACGACGACGACGACG 600
Db |||||
Qy 601 TGATGGCGCCCAACATGACGCGCGCGGATGACGCGCGGCGAGT 705
Db |||||
Qy 601 TGATGGCGCCCAACATGACGCGCGCGGATGACGCGCGGCGAGT 705
Db |||||
Qy 661 TGGGCACCGGCATGGAGCTGCGCGCGGCGGATCGACGCGGCGAGCT 705
Db |||||
Qy 661 TGGGCACCGGCATGGAGCTGCGCGCGGCGGATCGACGCGGCGAGCT 705
Db |||||

```

```

RESULT 8
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US2002018747A1
; GENERAL INFORMATION:
; APPLICANT: Drenkow, Jorg
; APPLICANT: Gengeras, Thomas
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0

```

```

; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-13

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
Db |||||
Qy 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
Db |||||
Qy 61 CGATCAAGGAGTCTTTCGGGACACGACGCTGTCCAGTTCATGGACCAACAAACCCCG 120
Db |||||
Qy 61 CGATCAAGGAGTCTTTCGGGACACGACGCTGTCCAGTTCATGGACCAACAAACCCCG 120
Db |||||
Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTGGCGCTGGCGCGCGGTGTCTGTCCCGGG 180
Db |||||
Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTGGCGCTGGCGCGCGGTGTCTGTCCCGGG 180
Db |||||
Qy 181 AGCGGGCGGGCTGGAGGTCCGGAAGTGCACACCGCTCCCACTACGGCCGGATGTGCCCGA 240
Db |||||
Qy 181 AGCGGGCGGGCTGGAGGTCCGGAAGTGCACACCGCTCCCACTACGGCCGGATGTGCCCGA 240
Db |||||
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCCGGG 300
Db |||||
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCCGGG 300
Db |||||
Qy 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGCGTGGTCAACG 360
Db |||||
Qy 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGCGTGGTCAACG 360
Db |||||
Qy 361 ACAGATTCCTACCTGACCCGCAAGAGGACCGCCACGTCGTTGGTGGCGACGGCCAACT 420
Db |||||
Qy 361 ACAGATTCCTACCTGACCCGCAAGAGGACCGCCACGTCGTTGGTGGCGACGGCCAACT 420
Db |||||
Qy 421 CGCGGATCGAGACACAGGGCGGTTCGCGAGGCGCGGTTCGCGAGGCGCGGTTCGCGAGGCGG 480
Db |||||
Qy 421 CGCGGATCGAGACACAGGGCGGTTCGCGAGGCGCGGTTCGCGAGGCGCGGTTCGCGAGGCGG 480
Db |||||
Qy 481 GCGAGTTCGAGTACGTGCGCTTCGCGAGGCGCGGTTCGCGAGGCGCGGTTCGCGAGGCGCGG 540
Db |||||
Qy 481 GCGAGTTCGAGTACGTGCGCTTCGCGAGGCGCGGTTCGCGAGGCGCGGTTCGCGAGGCGCGG 540
Db |||||
Qy 541 TGTGTCTGTGGCCACCGCGATGATCCGTTCTCTCGAGCACGACGACGACGACGACGACGACG 600
Db |||||
Qy 541 TGTGTCTGTGGCCACCGCGATGATCCGTTCTCTCGAGCACGACGACGACGACGACGACGACG 600
Db |||||
Qy 601 TGATGGCGCCCAACATGACGCGCGCGGATGACGCGCGGCGAGT 705
Db |||||
Qy 601 TGATGGCGCCCAACATGACGCGCGCGGATGACGCGCGGCGAGT 705
Db |||||
Qy 661 TGGGCACCGGCATGGAGCTGCGCGCGGCGGATCGACGCGGCGAGCT 705
Db |||||
Qy 661 TGGGCACCGGCATGGAGCTGCGCGCGGCGGATCGACGCGGCGAGCT 705
Db |||||

```

```

RESULT 9
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US2002018747A1
; GENERAL INFORMATION:
; APPLICANT: Drenkow, Jorg
; APPLICANT: Gengeras, Thomas
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-16
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0

```

```
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14
```

```
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1 CCCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTCGGCACACGACGCTGCCAGTTCATGGACCAAGACACCCCG 120
Db 61 CGATCAAGAGGTTCTTCGGCACACGACGCTGCCAGTTCATGGACCAAGACACCCCG 120
QY 121 TGTCCGGGCTCAACCAAGCGCGCTGTTCGGCGCTGGGCGCCGGTGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCAACCAAGCGCGCTGTTCGGCGCTGGGCGCCGGTGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCGACGCTGACCGCTCCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGCGCGGCTGGAGGTCGCGACGCTGACCGCTCCCACTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGTCGCGACGCTGACCGAAGGTGGTCGACGCGCGTGGTCACCG 300
Db 241 TCGAGACCCCGAGGTCGCGACGCTGACCGAAGGTGGTCGACGCGCGTGGTCACCG 300
QY 301 TCAACCCGTTCCGGGTTTCATCGAGACCGCTGACCGAAGGTGGTCGACGCGCGTGGTCACCG 360
Db 301 TCAACCCGTTCCGGGTTTCATCGAGACCGCTGACCGAAGGTGGTCGACGCGCGTGGTCACCG 360
QY 361 ACAGATCCACTACTGACCGCGCGAGGAGGACCGCGACGCTGGTGGCGAGGCGCAACT 420
Db 361 ACAGATCCACTACTGACCGCGCGAGGAGGACCGCGACGCTGGTGGCGAGGCGCAACT 420
QY 421 CGCGGATCGACGACGAGGCGCGGTTCCGAGGCGCGGTTCCGAGGCGCGGTTCCGAGGCGG 480
Db 421 CGCGGATCGACGACGAGGCGCGGTTCCGAGGCGCGGTTCCGAGGCGCGGTTCCGAGGCGG 480
QY 481 GCGAGTTCGAGTACGTCGCTCGTCCGAGGTGGAATACATGACGAGTGTCCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTCGCTCGTCCGAGGTGGAATACATGACGAGTGTCCGCGCCAGA 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGCAACCGTGC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGCAACCGTGC 600
QY 601 TGTATGGGCGCCAAATATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660
Db 601 TGTATGGGCGCCAAATATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660
QY 661 TGGGCAACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
Db 661 TGGGCAACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
```

```
RESULT 10
US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
```

```
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-16
```

```
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1 CCCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTCGGCACACGACGCTGCCAGTTCATGGACCAAGACACCCCG 120
Db 61 CGATCAAGAGGTTCTTCGGCACACGACGCTGCCAGTTCATGGACCAAGACACCCCG 120
QY 121 TGTCCGGGCTCAACCAAGCGCGCTGTTCGGCGCTGGGCGCCGGTGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCAACCAAGCGCGCTGTTCGGCGCTGGGCGCCGGTGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCGACGCTGACCGCTCCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGCGCGGCTGGAGGTCGCGACGCTGACCGCTCCCACTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGTCGCGACGCTGACCGAAGGTGGTCGCTGGTGGTGGTATGGCGGG 300
Db 241 TCGAGACCCCGAGGTCGCGACGCTGACCGAAGGTGGTCGCTGGTGGTGGTATGGCGGG 300
QY 301 TCAACCCGTTCCGGGTTTCATCGAGACCGCTGACCGAAGGTGGTCGACGCGCGTGGTCACCG 360
Db 301 TCAACCCGTTCCGGGTTTCATCGAGACCGCTGACCGAAGGTGGTCGACGCGCGTGGTCACCG 360
QY 361 ACAGATCCACTACTGACCGCGCGAGGAGGACCGCGACGCTGGTGGCGAGGCGCAACT 420
Db 361 ACAGATCCACTACTGACCGCGCGAGGAGGACCGCGACGCTGGTGGCGAGGCGCAACT 420
QY 421 CGCGGATCGACGACGAGGCGCGGTTCCGAGGCGCGGTTCCGAGGCGCGGTTCCGAGGCGG 480
Db 421 CGCGGATCGACGACGAGGCGCGGTTCCGAGGCGCGGTTCCGAGGCGCGGTTCCGAGGCGG 480
QY 481 GCGAGTTCGAGTACGTCGCTCGTCCGAGGTGGAATACATGACGAGTGTCCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTCGCTCGTCCGAGGTGGAATACATGACGAGTGTCCGCGCCAGA 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGCAACCGTGC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGCAACCGTGC 600
QY 601 TGTATGGGCGCCAAATATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660
Db 601 TGTATGGGCGCCAAATATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660
QY 661 TGGGCAACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
Db 661 TGGGCAACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
```

```
RESULT 11
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
```


; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1999-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 24
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 ; US-09-285-306-24

Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 8.2e-156;
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
 Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
 QY 61 CGATCAAGGAGTTCCTCCGACACGACGAGTGTCCAGTTTCATGGACCAACACCCCG 120
 Db 61 CGATCAAGGAGTTCCTCCGACACGACGAGTGTCCAGTTTCATGGACCAACACCCCG 120
 QY 121 TGTCCGGGCTCACCAACGCGCGCTGTCCGCGTGGGCGCGGTGTCTGTCCCGGG 180
 Db 121 TGTCCGGGCTCACCAACGCGCGCTGTCCGCGTGGGCGCGGTGTCTGTCCCGGG 180
 QY 181 AGCGGGCGGGCTGGAGGTCCGCGACGTGCACCGCTCCACTACGCGCGGATGTGCCGA 240
 Db 181 AGCGGGCGGGCTGGAGGTCCGCGACGTGCACCGCTCCACTACGCGCGGATGTGCCGA 240
 QY 241 TCAGAGACCCCGAGGGTCCAAACATCGTCTGATCGGCTCGCTGTCTGATGTCGCGGG 300
 Db 241 TCAGAGACCCCGAGGGTCCAAACATCGTCTGATCGGCTCGCTGTCTGATGTCGCGGG 300
 QY 301 TCAACCGGTTCCGGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGGCGTGGTCA 360
 Db 301 TCAACCGGTTCCGGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGGCGTGGTCA 360
 QY 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCCACCGTGTGGCGGCGCAACT 420
 Db 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCCACCGTGTGGCGGCGCAACT 420
 QY 421 CGCCGATCGACGACAAAGGGCGGTTCCGAGAGCCCGGGTGTGGTCCGCGCAAGGCGG 480
 Db 421 CGCCGATCGACGACAAAGGGCGGTTCCGAGAGCCCGGGTGTGGTCCGCGCAAGGCGG 480
 QY 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGGACTACATGGACGTGTCCCGCGCCAGA 540
 Db 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGGACTACATGGACGTGTCCCGCGCCAGA 540
 QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGCGCAACCGTCC 600
 Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGCGCAACCGTCC 600
 QY 601 TGATGGGCGCAACATCGACGCGCGTTCGCTGTGGTGGTGGTGGTGGTGGTGGTGGTGG 660
 Db 601 TGATGGGCGCAACATCGACGCGCGTTCGCTGTGGTGGTGGTGGTGGTGGTGGTGGTGG 660
 QY 661 TGGGACCGGCGATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705
 Db 661 TGGGACCGGCGATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705

RESULT 12
 US-09-285-306-17
 ; Sequence 17, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 17
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 ; US-09-285-306-17

Query Match 99.8%; Score 703.4; DB 9; Length 705;
 Best Local Similarity 99.9%; Pred. No. 1.1e-155;
 Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
 Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
 QY 61 CGATCAAGGAGTTCCTCCGCGACGACGAGTGTCCAGTTTCATGGACCAACACCCCG 120
 Db 61 CGATCAAGGAGTTCCTCCGCGACGACGAGTGTCCAGTTTCATGGACCAACACCCCG 120
 QY 121 TGTCCGGGCTCACCAACGCGCGCTGTCCGCGTGGGCGCGGTGTCTGTCCCGGG 180
 Db 121 TGTCCGGGCTCACCAACGCGCGCTGTCCGCGTGGGCGCGGTGTCTGTCCCGGG 180
 QY 181 AGCGGGCGGGCTGGAGGTCCGCGACGTGCACCGTCCACTACGCGCGGATGTGCCGA 240
 Db 181 AGCGGGCGGGCTGGAGGTCCGCGACGTGCACCGTCCACTACGCGCGGATGTGCCGA 240
 QY 241 TCAGAGACCCCGAGGGTCCAAACATCGTCTGATCGGCTCGCTGTCTGATGTCGCGGG 300
 Db 241 TCAGAGACCCCGAGGGTCCAAACATCGTCTGATCGGCTCGCTGTCTGATGTCGCGGG 300
 QY 301 TCAACCGGTTCCGGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGGCGTGGTCA 360
 Db 301 TCAACCGGTTCCGGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGGCGTGGTCA 360
 QY 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCCACCGTGTGGCGGCGCAACT 420
 Db 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCCACCGTGTGGCGGCGCAACT 420
 QY 421 CGCCGATCGACGACAAAGGGCGGTTCCGAGAGCCCGGGTGTGGTCCGCGCAAGGCGG 480
 Db 421 CGCCGATCGACGACAAAGGGCGGTTCCGAGAGCCCGGGTGTGGTCCGCGCAAGGCGG 480
 QY 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGGACTACATGGACGTGTCCCGCGCCAGA 540
 Db 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGGACTACATGGACGTGTCCCGCGCCAGA 540
 QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGCGCAACCGTCC 600
 Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGCGCAACCGTCC 600
 QY 601 TGATGGGCGCAACATCGACGCGCGTTCGCTGTGGTGGTGGTGGTGGTGGTGGTGGTGG 660
 Db 601 TGATGGGCGCAACATCGACGCGCGTTCGCTGTGGTGGTGGTGGTGGTGGTGGTGGTGG 660
 QY 661 TGGGACCGGCGATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705
 Db 661 TGGGACCGGCGATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705

RESULT 13
 US-09-285-306-3
 ; Sequence 3, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingeras, Thomas

```
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
;
US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 1.8e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCACACCGACAGCCAGTCCAGTTCATGACACAGAAACAACCCGC 60
DB 1 CCCAGACGTGGAGGCGATCACACCGACAGCCAGTCCAGTTCATGACACAGAAACAACCCGC 60
QY 61 CGATCAAGAGTTCCTTCGGCACCAGCCAGTGTCCAGTTCATGACACAGAAACAACCCGC 120
DB 61 CGATCAAGAGTTCCTTCGGCACCAGCCAGTGTCCAGTTCATGACACAGAAACAACCCGC 120
QY 121 TGTCCGGGTCACCCACAAGCGCCGCTGTCCGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
DB 121 TGTCCGGGTCACCCACAAGCGCCGCTGTCCGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCGAGTCGCGAGTCACCCGTCACCTACGCGCGGATGCGCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCGCGAGTCGCGAGTCGCGAGTCACCCGTCACCTACGCGCGGATGCGCCGA 240
QY 241 TCAGACACCCGGAGGTCCTCAACATCGGTCGTGATCGGCTCGTGTCCGTTATGCGCGGG 300
DB 241 TCAGACACCCGGAGGTCCTCAACATCGGTCGTGATCGGCTCGTGTCCGTTATGCGCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCCGCTACCGCAAGGTGTCGACGCGGTGTCACCG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACCCGCTACCGCAAGGTGTCGACGCGGTGTCACCG 360
QY 361 ACAGATTCACCTACCTGACCGCGACGAGGAGCCGACAGTGTGGCGGCGAGCCAACT 420
DB 361 ACAGATTCACCTACCTGACCGCGACGAGGAGCCGACAGTGTGGCGGCGAGCCAACT 420
QY 421 CGCCGATCGAGCAAGGCGCGGTTCCGCGAGGCCCGGGTGTGTGTCCGCGCAAGGGCG 480
DB 421 CGCCGATCGAGCAAGGCGCGGTTCCGCGAGGCCCGGGTGTGTGTCCGCGCAAGGGCG 480
QY 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGAATACATGACACGTGTCCGCGCCAGA 540
DB 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGAATACATGACACGTGTCCGCGCCAGA 540
QY 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705
```

```
DB 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705

RESULT 14
US-09-285-306-11
; Sequence 11, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
;
US-09-285-306-11

Query Match      98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 4.3e-153;
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCACACCGACAGCCCTGATCAACATCCGTCAGTCGTGGCGG 60
DB 1 CCCAGACGTGGAGGCGATCACACCGACAGCCCTGATCAACNTCCGTCGTCGTGGCGG 60
QY 61 CGATCAAGAGTTCCTTCGGCACCAGCCAGTGTCCAGTTCATGACACAGAAACAACCCGC 120
DB 61 CGATCAAGAGTTCCTTCGGCACCAGCCAGTGTTCCTCAGTTCATGACACAGAAACAACCCGC 120
QY 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
DB 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCGACGTCCGCGACGTCCACCTCCACTACGCGCGGATGTCGCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCGCGACGTCCGCGACGTCCACCTCCACTACGCGCGGATGTCGCCGA 240
QY 241 TCGAGACCCCGAGGTCCTCAACATCGGTCGTGATCGGTCGTGTGTCGTTATGCGCGGG 300
DB 241 TCGAGACCCCGAGGTCCTCAACATCGGTCGTGATCGGTCGTGTGTCGTTATGCGCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCCGCTACCGCAAGGTGTCGACGCGGTGTCACCG 360
DB 301 TCAACCCGTTCCGGTTTCATCGAGACCCGCTACCGCAAGGTGTCGACGCGGTGTCACCG 360
QY 361 ACAGATTCACCTACCTGACCGCGACGAGGAGCCGACAGTGTGGCGGCGAGCCAACT 420
DB 361 ACAGATTCACCTACCTGACCGCGACGAGGAGCCGACAGTGTGGCGGCGAGCCAACT 420
QY 421 CGCCGATCGAGCAAGGCGCGGTTCCGCGAGGCCCGGGTGTGTGTCCGCGCAAGGGCG 480
DB 421 CGCCGATCGAGCAAGGCGCGGTTCCGCGAGGCCCGGGTGTGTGTCCGCGCAAGGGCG 480
QY 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGAATACATGACACGTGTCCGCGCCAGA 540
DB 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTGGAATACATGACACGTGTCCGCGCCAGA 540
```


This Page Blank (uspo)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model
Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds
(without alignments)
11150.034 Million cell updates/sec

Title: US-09-285-306-9
Perfect score: 705
Sequence: 1 cccagacgtgagggcgtc.....ggcgatcgagggcgacgt 705

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents NA: *
1: /cgn2_6/ptodata/1/ina/5A-COMB.seq.*
2: /cgn2_6/ptodata/1/ina/5B-COMB.seq.*
3: /cgn2_6/ptodata/1/ina/6A-COMB.seq.*
4: /cgn2_6/ptodata/1/ina/6B-COMB.seq.*
5: /cgn2_6/ptodata/1/ina/PTUS-COMB.seq.*
6: /cgn2_6/ptodata/1/ina/backfile1.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	3	US-08-520-946-135
11	530.4	75.2	620	3	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	3	US-08-520-946-136
19	528.8	75.0	620	3	US-08-520-946-137
20	528.8	75.0	620	3	US-08-520-946-139
21	528.8	75.0	620	3	US-08-520-946-140
22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	411	58.3	5099	4	US-09-887-052-1

28	409.4	58.1	5099	4	US-09-887-052-3	Sequence 3, Appli
29	409.4	58.1	5099	4	US-09-887-052-5	Sequence 5, Appli
30	402	57.0	4227	4	US-09-902-540-8919	Sequence 8919, Ap
31	402	57.0	9367	4	US-09-902-540-951	Sequence 951, Ap
32	371.2	52.7	4074	4	US-09-252-991A-4737	Sequence 4737, Ap
33	371.2	52.7	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
34	337.2	47.8	4083	4	US-09-489-039A-22	Sequence 22, Appl
35	337.2	47.8	4206	4	US-09-489-039A-30	Sequence 20, Appl
36	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
37	293.4	41.6	432	3	US-09-082-614A-59	Sequence 59, Appl
38	286.2	40.6	324	3	US-08-750-088A-36	Sequence 36, Appl
39	286.2	40.6	324	4	US-09-722-319-36	Sequence 36, Appl
40	265.2	37.6	2964	4	US-09-540-236-1097	Sequence 1097, Ap
41	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
42	265.2	37.6	31063	4	US-09-596-002-20	Sequence 20, Appl
43	255.6	36.3	319	3	US-08-750-088A-35	Sequence 35, Appl
44	255.6	36.3	319	4	US-09-722-319-35	Sequence 35, Appl
45	249.8	35.4	11935	4	US-09-634-238-401	Sequence 401, App

ALIGNMENTS

RESULT 1

US-08-797-812-24
; Sequence 24, Application US/08797812
; Patent No. 6228575
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas A.
; APPLICANT: Mack, David
; APPLICANT: Chee, Mark S.
; APPLICANT: Berno, Anthony J.
; APPLICANT: Stryer, Lubert
; APPLICANT: Ghandour, Ghassan
; APPLICANT: Wang, Ching
; TITLE OF INVENTION: Chip-Based Species Identification and
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/797,812
FILING DATE: 07-FEB-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/017,765
FILING DATE: 15-MAY-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/629,031
FILING DATE: 08-APR-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/012,631
FILING DATE: 01-MAR-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/011,339
FILING DATE: 08-FEB-1996
ATTORNEY/AGENT INFORMATION:
NAME: Fitts, Renee A.
REGISTRATION NUMBER: 35,136
REFERENCE/DOCKET NUMBER: 16528X-018550
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-326-2400
TELEFAX: 415-326-2422

; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 706 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-797-812-24

Query Match 86.6%; Score 610.6; DB 3; Length 706;
Best Local Similarity 91.8%; Pred. No. 1.1e-118;
Matches 646; Conservative 0; Mismatches 59; Indels 0; Gaps 0;
QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db |||||||
QY 2 CCAGGACGTGGAGGCGATCACACCGCAGACCGTTGATCAACATCCGTCGTGGCGG 61
Db |||||||
QY 61 CGATCAAGAGTTCTTTCCGACACAGCAGCTGTCCAGTTTCATGGACCAACACCCCG 120
Db |||||||
QY 62 CGATCAAGAGTTCTTTCCGACACAGCAGCTGTGAGCCAAATTCATGGACCAACACCCCG 121
Db |||||||
QY 121 TGTCCGGGCTCACCCACAGCGCGCTGTCCGCGCTGGGCGCGGTCTGTCCCGGG 180
Db |||||||
QY 122 TGTCCGGGTTGACCCCAAGCGCGGACTGTCCGCGCTGGGCGCGGTCTGTCACTGT 181
Db |||||||
QY 181 AGCGGCGCGGGCTGGAGGTCGCGGACGTGCACCCGTCACACTACGGCCCGGATGTGCCGA 240
Db |||||||
QY 182 AGCGTCGCGGGCTGGAGGTCGCGGACGTGCACCCGTCGCACTACGGCCGGATGTGCCGA 241
Db |||||||
QY 241 TCAGACCCCGGAGGTTCCAAACATCGGTCGTGATCGGCTCGCTGTGTTATGCGCGGG 300
Db |||||||
QY 242 TCGAAACCCCTGAGGGGCGCAACATCGGTCGTGATCGGCTCGCTGTGCTGATACGCGCGG 301
Db |||||||
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTCGACGCGGTGTACCG 360
Db |||||||
QY 302 TCAACCCGTTCCGGTTTCATCGAAACCGCGTACCGCAAGGTGTCGACGCGGTGTAGCG 361
Db |||||||
QY 361 ACAGATCCACTACCTGACCGCGACGAGGAGCCGCCACCGTGGTGGCGCAGGCCAACT 420
Db |||||||
QY 362 ACAGATCGTGTACTGACCGCGACGAGGAGACCGCCACCGTGGTGGCACAGGCCAATT 421
Db |||||||
QY 421 CGCCGATCGACGACAAAGGCGCGGTTCCGCGAGCGCCCGGTTGCTGCTCCGCGCAAGCGG 480
Db |||||||
QY 422 CGCCGATCGATCGGACGCGTCTGCTCGAGCGCGCGCTGCTGCTCCGCGCAAGCGG 481
Db |||||||
QY 481 GCGAGTTCGAGTACGTCCTCTGTCGAGGTGACTACATGGACGTTGTCGCGCGCCAGA 540
Db |||||||
QY 482 GCGAGTTCGAGTACGTCCTCTGTCGAGGTGACTACATGGACGTTCTCGCCCGCCAGA 541
Db |||||||
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCTCGAGCACGACGACGCAACCGTGGCC 600
Db |||||||
QY 542 TGGTGTCCGTGGCCACCGCGATGATTCCTTCTCTGAGCACGACGACGCAACCGTGGCC 601
Db |||||||
QY 601 TGATGGGCGCAACATCGACGCGCAGCGGTTCCGCTGTGTCGACGAGGCGCGCTCG 660
Db |||||||
QY 602 TCATGGGGGCAACATGACGCGCAGCGGTGCGCTGCTGCTGCTGCTGCTGCTGCTGCTG 661
Db |||||||
QY 661 TGGGACCCGCGATGGAGCTGCGCGCGCGGATCGACCGGCGAGCT 705
Db |||||||
QY 662 TGGGACCCGCGATGGAGCTGCGCGCGCGGATCGACCGGCGAGCT 706
Db |||||||

RESULT 2

US-09-103-840A-2
; Sequence 2, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TUBERCULOSIS

; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 2
; LENGTH: 4403765
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; FEATURE:
; OTHER INFORMATION: CDC 1551
; OTHER INFORMATION: "n" bases at various positions throughout the sequence
; OTHER INFORMATION: represent a, t, c or g
US-09-103-840A-2

Query Match 85.5%; Score 603; DB 3; Length 4403765;
Best Local Similarity 91.4%; Pred. No. 1.2e-116;
Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;
QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db |||||||
QY 61 CGATCAAGAGTTCTTTCCGACACAGCAGCTGTCCAGTTTCATGGACCAACACCCCG 120
Db |||||||
QY 63023 CGATCAAGAGTTCTTTCCGACACAGCAGCTGAGCCAAATTCATGGACCAACACCCCG 763082
Db |||||||
QY 121 TGTCCGGGCTCACCCACAGCGCGCTGTCCGCGCTGGGCGCGGTCTGTCCCGGG 180
Db |||||||
QY 763083 TGTCCGGGTTGACCCACAGCGCGGACTGTCCGCGCTGGGCGCGGTCTGTCACTGT 763142
Db |||||||
QY 181 AGCGGCGCGGGCTGGAGGTCGCGGACGTGCAACCCGTCGCCACTACGCGCGGATGTGCCGA 240
Db |||||||
QY 763143 AGCGTCCCGGGCTGGAGGTCGCGGACGTGCAACCCGTCGCACTACGCGCGGATGTGCCGA 763202
Db |||||||
QY 241 TCAGACCCCGGAGGTTCCAAACATCGGTTCTGATCGGCTCGCTGTGCTGCTGTATGCGCGGG 300
Db |||||||
QY 763203 TCGAAACCCCTGAGGGGCGCAACATCGGTTCTGATCGGCTCGCTGTGCTGCTGCTGCTG 763252
Db |||||||
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGAAAGTGTGTCACGCGCGTGTCCACCG 360
Db |||||||
QY 763263 TCAACCCGTTCCGGTTTCATCGAAACCGCGTACCGAAAGTGTGTCACGCGCGTGTAGCG 763322
Db |||||||
QY 361 ACAGATCCACTACCTGACCGCGCAGAGGAGACCGCACCGTGGTGGCGCAGGCCAACT 420
Db |||||||
QY 763323 ACAGATCGTGTACTGACCGCGCAGAGGAGACCGCCACCGTGGTGGCACAGGCCAATT 763382
Db |||||||
QY 421 CGCCGATCGACGACAAAGGCGCGGTTCCGCGAGGCGCGGTTGCTGCTCCGCGCGCAAGCGG 480
Db |||||||
QY 763383 CGCCGATCGATCGGACGCGTCTGCTCGAGCGCGCGTGTGCTGCTGCTGCTGCTGCTGCTG 763442
Db |||||||
QY 481 GCGAGTTCGAGTACGTCCTCGTCCGAGTGGACTACATGACGCTGTGTCGCGCGCCAGA 540
Db |||||||
QY 763443 GCGAGTTCGAGTACGTCCTCGTCTGAGGTGGACTACATGAGCTGTGTCGCGCGCCAGA 763502
Db |||||||
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCTCTCGAGCACGACGACGCAACCGTGGCC 600
Db |||||||
QY 763503 TGGTGTCCGTGGCCACCGCGATGATTCCTTCTCTGAGCACGACGACGCAACCGTGGCC 763562
Db |||||||
QY 601 TGATGGGCGCCAAACATGACGCGCCAGCGGTTCCGCTGTGTCGACGAGGCGCGCTCG 660
Db |||||||
QY 763563 TCATGGGGGCAACATGACGCGCCAGCGGTGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 763622
Db |||||||
QY 661 TGGGACCCGCGATGGAGCTGCGCGCGCGGATCGACGCGG 699
Db |||||||
QY 763623 TGGGACCCGCGATGGAGCTGCGCGCGCGGATCGACGCGG 763661
Db |||||||

RESULT 3

US-09-103-840A-1
; Sequence 1, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:

```
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103.840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.4%; Pred. No. 1.2e-116; Indels 0; Gaps 0;
Matches 639; Conservative 0; Mismatches 60;

Qy 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCACAGTGGCGG 60
Db 761003 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCGCGG 761062

Qy 61 CGATCAAGGAGTCTTCGGCACACCGCAGCTGTCCCGAGTTTCATGGACCAACACCCGC 120
Db 761063 CGATCAAGGAGTCTTCGGCACACCGCAGCTGTCCCGAGTTTCATGGACCAACACCCGC 761122

Qy 121 TGTCCGGGCTCACCCACACGCGCTGTCCGGCTGGCGGCTGGCGGCTGTCTGTCGCGG 180
Db 761123 TGTCCGGGCTCACCCACACGCGCTGTCCGGCTGGCGGCTGGCGGCTGTCTGTCGCGG 761182

Qy 181 AGCGGGCCGGGCTGGAGGTCCGGACGTGCACCCGTCCCACTACGGCCGGATGTGCCGA 240
Db 761183 AGCGTCCGGGCTGGAGGTCCGGACGTGCACCCGTCCCACTACGGCCGGATGTGCCGA 761242

Qy 241 TCAGAGCCCGGAGGGTCCAAACATCGGTCTGATCGGCTCGCTGCTGTGTGTATGCGCGG 300
Db 761243 TCAGAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGCTGCTGTGTGTATGCGCGG 761302

Qy 301 TCAACCGGTTCCGGTTTCATCGACGCGCTACCGCAAGGTGGTTCGAGCGGTGTCACCG 360
Db 761303 TCAACCGGTTCCGGTTTCATCGAACCGCTACCGCAAGGTGGTTCGAGCGGTGTTAGCG 761362

Qy 361 ACAGATCCCACTACTGACCGCGACGAGGAGGACCGCCACGTGGTGGCGCGCAACT 420
Db 761363 ACAGATCGGTACTGACCGCGACGAGGAGGACCGCCACGTGGTGGCGCGCAATT 761422

Qy 421 CGCGGATCGACACAGGGCCGGTTTCGGGAGGCGCGGGTGTGTGTCGCGCGCAAGCGG 480
Db 761423 CGCGGATCGATCGGAGCGTTCGTTTCGTCAGCGCGCGGTGCTGTCGCGCGCAAGCGG 761482

Qy 481 GCGAGGTCGAGTACGTGCTCGTCCGAGTGGACTATACGAGCGTGTGTCGCGCGCAGA 540
Db 761483 GCGAGGTCGAGTACGTGCTCGTCCGAGTGGACTATACGAGCGTGTGTCGCGCGCAGA 761542

Qy 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCACGACGCGCAACCGTGCGCC 600
Db 761543 TGTGTGCGTGGCCACCGCGATGATCCCTTCTTGAGCACGACGCGCAACCGTGCGCC 761602

Qy 601 TGATGGGCGCAACATGACGCGCAGCGGCTTCGCTGGTGGCGAGCGGCGCGCTGG 660
Db 761603 TCATGGGGGCAACATGACGCGCAGCGGCTTCGCTGGTGGCGAGCGGCGCGCTGG 761662

Qy 661 TGGGACCGGATGGAGCTGGCGCGCGATCGACGGG 699
Db 761663 TGGGACCGGATGGAGCTGGCGCGCGATCGACGGG 761701

RESULT 4
US-08-313-185-57
```

```
; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-313-185-57
```

```
Query Match      79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.1e-107;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

Qy 1 CCAGAGCGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCACAGTGGCGG 60
Db 1124 CCAGAGCGTGGAGGCGATCACACCGCAGACCCCTGATCAATATCCGTCGCGTGGTGGCGG 1183

Qy 61 CGATCAAGGAGTCTTCGGCACACCGCAGCTGCCAGTTCATGGACCAACACCCGC 120
Db 1184 CTATCAAGGAATCTTCGGCACACCGCAGCTGTGCAGTTCATGGATCAGAACACCCCTC 1243

Qy 121 TGTCCGGGCTCACCCACAAAGCGCGCTGTCCGGCGCTGGCGCGCTGGTCTGTCTGCCGG 180
Db 1244 TGTCCGGGCTCACCCACAAAGCGCGCTGTCCGGCGCTGGCGCGCTGGTCTGTCTGCCGTG 1303

Qy 181 AGCGGGCCGGGCTGGAGGTCCGCGACGTGCACCCGTCCCACTACGCGCGGATGTGCCGA 240
Db 1304 AGCGTCCGGGCTTAGAGGTCCGTCGACGTGCACCCCTTCGCACTACGCGCGGATGTGCCGA 1363

Qy 241 TCAGAGACCCCGGAGGGTCCCAACATCGGTCTGATCCGCTCGCTGTGGTGTATGCCGGG 300
Db 1364 TCAGAGACCCCGGAGGGTCCCAACATAGGTCTGATTCGGTTCATTTGTGGTGTACGCCGG 1423

Qy 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGCAAGGTGGTGGACGCGGTGGTCAACCG 360
Db 1424 TCACCCCTTCGGGTTTCATCGAACAACCGGTACCGCAAGGTGGTGGACGCGGTGGTCAACCG 1483
```

```

QY 361 ACAGATCCACTACCTGACCGCCGACGAGGAGACCGCCACCGTGTGGCGCAGGCCAACT 420
    |||||
Db 1484 ACAGATCGATACCTGACCGCTGACGAGGAGACCGCCCACTGTCTGTGGCGCAGGCCAACT 1543
QY 421 CGCCGATCGACGACCAAGGCGCGGTTCGCGGAGCGCCGGTGTCTGTGGTCCGCGCAAGCGG 480
    |||||
Db 1544 CGCCGATCGACGAGGCGCGGTTCCTCGAGCGCGCGTGTCTGTGGTGTGGTGTGGTGTGG 1603
QY 481 GCGAGTTCGATACCTGACCGCTGTCTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGG 540
    |||||
Db 1604 GCGAGTTCGATACCTGACCGCTGTCTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGG 1663
QY 541 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 600
    |||||
Db 1664 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1723
QY 601 TGATGGGCGCCAACTGACGCGCCGCGTTCGCGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 660
    |||||
Db 1724 TGATGGGCGCTAACATGACGCGCCGCGTTCGCGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1783
QY 661 TGGGACCGCGCATGAGCTGCGCGCGCGCGCATGACGCGG 699
    |||||
Db 1784 TGGGTACCGGTATGAGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGG 1822

```

```

RESULT 5
US-09-082-614A-57
; Sequence 57, Application US/09082614A
; Patent No. 6124098
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/082,614A
; FILING DATE:
; CLASSIFICATION:
; PRIORITY APPLICATION DATA:
; APPLICATION NUMBER: US 08/313,185
; FILING DATE: 12-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single

```

```

; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-09-082-614A-57
Query Match 79.2%; Score 558.2; DB 3; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.1e-107;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;
QY 1 CCCAGAGCTGGAGGCGATCACACCGCAGACCCCTCATCAACATCCGTCCAGTCGTGGCGG 60
    |||||
Db 1124 CCCAGAGCTCGAGGCGATCACGCCGCGACGCTGATCAATCCGTCCGTGGTGTGGCGG 1183
QY 61 CGATCAAGAGGATCTTTCGGCACACAGCCAGCTGTCCAGTTTCATGACAGCAACAACCCGC 120
    |||||
Db 1184 CTATCAAGGAATCTTTCGGCACACAGCCAGCTGTCCAGTTTCATGATCAGAAACAACCTC 1243
QY 121 TGTCTGGGCTCAACCAAGGCGCGCTGTCTGGGCGCTGGGCGGCTGTCTGTCTCCGGG 180
    |||||
Db 1244 TGTCTGGGCTCAACCAAGGCGCGCTGTCTGGGCGCTGGGCGGCTGTCTGTCTCCGGT 1303
QY 181 AGCGGGCGGGCTGGAGGTCCGCGACGTGCACCCGTCCACTACGCGCGGATGTCGCCGA 240
    |||||
Db 1304 AGCGTGGCGGGCTAGAGGTCCGCGACGTGCACCCCTTCGACCTACGCGCGGATGTCGCCGA 1363
QY 241 TCGAGACCCCGGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTCTGTGTATGCGCGG 300
    |||||
Db 1364 TCGAGACTCCGAGGCGCGCAACATAGGTCTGATCGGTTTATTGTCTGTGTATGCGCGG 1423
QY 301 TCAACCCGTTTGGGTTTCATCGAGACGCGCTACCGAAGGTGTGTGTGTGTGTGTGTGTGT 360
    |||||
Db 1424 TCAACCCCTTTCGGGTTTCATCGAACAACCGTTACCGCAAAAGTGTGTGTGTGTGTGTGT 1483
QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGGAGCGCCACCGTGTGGCGCAGGCCAACT 420
    |||||
Db 1484 ACGAGATCGATACCTTGTACCGCTGACGAGGAGACCGCCATGTGTGGCGCAGGCCAACT 1543
QY 421 CGCCGATCGACGACCAAGGCGCGGTTTCGCGGAGGCGCGGTTGTGTGTGTGTGTGTGTGT 480
    |||||
Db 1544 CGCCGATCGACGAGGCGCGCGGTTTCTTCGAGCGCGCGTGTGTGTGTGTGTGTGTGTGT 1603
QY 481 GCGAGTTCGATACGTCGCTGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 540
    |||||
Db 1604 GCGAGTTCGATACGTCGCTGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1663
QY 541 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 600
    |||||
Db 1664 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1723
QY 601 TGATGGGCGCCAACTGACGCGCCGCGGTTTCGCTGTGTGTGTGTGTGTGTGTGTGTGTGT 660
    |||||
Db 1724 TGATGGGCGCTAACATGACGCGCCGCGGTTTCCGTGTGTGTGTGTGTGTGTGTGTGTGT 1783
QY 661 TGGGACCGCGCATGAGCTGCGCGCGCGCGCATGACGCGG 699
    |||||
Db 1784 TGGGTACCGGTATGAGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGGTGTGG 1822

```

```

RESULT 6
US-08-250-030-1
; Sequence 1, Application US/08250030
; Patent No. 5643723
; GENERAL INFORMATION:
; APPLICANT: Persing, David H.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in
; TITLE OF INVENTION: Clinical Specimens
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA

```



```

; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/250,030
; FILING DATE: 26-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Muetling, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 150.105US1
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-250-030-1

```

```

Query Match 76.7%; Score 540.4; DB 1; Length 970;
Best Local Similarity 91.1%; Pred. No. 5e-104;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

```

QY	1	CCGAGGAGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTGGCGG	60
DB	341	CCGAGGAGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTGGCGG	400
QY	61	CGATCAAGGAGTCTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAACAAACCCG	120
DB	401	CGATCAAGGAGTCTTCGGCACCAGCAGCTGTAGCCATTCATGGACCAACAAACCCG	460
QY	121	TGTGGGGTTCACCAACAGCGCGCTGTGGCGCTGGCGCGGCTGTCTCCCGG	180
DB	461	TGTGGGGTTCACCAACAGCGCGCTGTGGCGCTGGCGCGGCTGTCTCCCGG	520
QY	181	AGCGGCGCGGCTGGAGGTCGCGACGTCACCGCTCCCACTACGCGCGGATGCCCCA	240
DB	521	AGCGTCCCGGCTGGAGGTCGCGACGTCACCGCTCCCACTACGCGCGGATGCCCCA	580
QY	241	TCGAGACCCCGGAGGTCACCAATCGGCTGTATCGGCTCGCTGTCTATGCGCGG	300
DB	581	TCGAAACCCCTGAGGGGCCAACATCGGCTGTATCGGCTCGCTGTCTATGCGCGG	640
QY	301	TCAACCCGCTGGGTTTCATCGAGACGCCGTAACGGAAGTGTGTGACGCGGTGACCG	360
DB	641	TCAACCCGCTGGGTTTCATCGAGACGCCGTAACGGAAGTGTGTGACGCGGTGACCG	700
QY	361	ACGAGATCCACTACCTGACCGCGCAGAGAGACCGCCACGTCGTCGCGCGGCAACT	420
DB	701	ACGAGATCCACTACCTGACCGCGCAGAGAGACCGCCACGTCGTCGCGCGGCAACT	760
QY	421	CGCGGATTCGACCAACAGGGCGGTTTCGCGAGAGCGCGGCTGTGGTCCGCGCAAGCGG	480
DB	761	CGCGGATTCGACCAACAGGGCGGTTTCGCGAGAGCGCGGCTGTGGTCCGCGCAAGCGG	820
QY	481	GCAGGTCGAGTACGTGCCCTCGTCGAGGTGACATACATGAGCGTGTGCCCGCGCAGA	540
DB	821	GCAGGTCGAGTACGTGCCCTCGTCGAGGTGACATACATGAGCGTGTGCCCGCGCAGA	880
QY	541	TGTTGTCGTTGGCCACCGCGATGATCCGTTCTTCGAGCACGACGCGCAACCGTGGCC	600
DB	881	TGTTGTCGTTGGCCACCGCGATGATCCGTTCTTCGAGCACGACGCGCAACCGTGGCC	940
QY	601	TGATGGCGCAACATGACGCGCGGCGG	630
DB	941	TCATGGGGCAACATGACGCGCGGCGG	970

```

RESULT 7
PCT-US95-06790-1
; Sequence 1, Application PC/TUS9506790
; GENERAL INFORMATION:
; APPLICANT: Mayo Foundation for Medical Education and Research
; APPLICANT: and Hoffmann-La Roche Inc.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/06790
; FILING DATE: 26-MAY-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Raasch, Kevin W.
; REGISTRATION NUMBER: 35,651
; REFERENCE/DOCKET NUMBER: 150.105WO1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-3061
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
PCT-US95-06790-1

```

```

Query Match 76.7%; Score 540.4; DB 5; Length 970;
Best Local Similarity 91.1%; Pred. No. 5e-104;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

```

QY	1	CCGAGGAGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTGGCGG	60
DB	341	CCGAGGAGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTGGCGG	400
QY	61	CGATCAAGGAGTCTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAACAAACCCG	120
DB	401	CGATCAAGGAGTCTTCGGCACCAGCAGCTGTAGCCATTCATGGACCAACAAACCCG	460
QY	121	TGTGGGGTTCACCAACAGCGCGCTGTGGCGCTGGCGCGGCTGTCTCCCGG	180
DB	461	TGTGGGGTTCACCAACAGCGCGCTGTGGCGCTGGCGCGGCTGTCTCCCGG	520
QY	181	AGCGGCGCGGCTGGAGGTCGCGACGTCACCGCTCCCACTACGCGCGGATGCCCCA	240
DB	521	AGCGTCCCGGCTGGAGGTCGCGACGTCACCGCTCCCACTACGCGCGGATGCCCCA	580
QY	241	TCGAGACCCCGGAGGTCACCAATCGGCTGTATCGGCTCGCTGTCTATGCGCGG	300
DB	581	TCGAAACCCCTGAGGGGCCAACATCGGCTGTATCGGCTCGCTGTCTATGCGCGG	640
QY	301	TCAACCCGCTGGGTTTCATCGAGACGCCGTAACGGAAGTGTGTGACGCGGTGACCG	360
DB	641	TCAACCCGCTGGGTTTCATCGAGACGCCGTAACGGAAGTGTGTGACGCGGTGACCG	700
QY	361	ACGAGATCCACTACCTGACCGCGCAGAGAGACCGCCACGTCGTCGCGCGGCAACT	420


```
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match          75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCCAGTCGGTGGCGGATCAAGAGGTTCTTCGGCACACCGACGCTGTCC 95
   |||||
Db 620 ATCAACATCCGGCGGTGGTGGCGGATCAAGAGGTTCTTCGGCACACCGACGCTGAGC 561
   |||||

QY 96 CAGTTTCATGACAGCAACACCCGCTGTCTGGGGCTCAACCAAGCGCCGCTGTGGCG 155
   |||||
Db 560 CAATTTCATGACAGCAACACCCGCTGTCTGGGGTTGACCCACAAGCGCCGACTGTGGCG 501
   |||||

QY 156 CTGGGCCGGGTGGTCTGTCGGGAGCGGGCGGGCTGAGGTTCGGGACGTGACCCG 215
   |||||
Db 500 CTGGGCCCGGCGGTCTGTACGTGAGCGTGCCTGGGCTGAGGTTCGGGACGTGACCCG 441
   |||||

QY 216 TCCCACTACGCGCGGATGTCGCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
   |||||
Db 440 TCCCACTACGCGCGGATGTCGCCGATCGAAGCCCTGAGGGGCCCAACATCGGTCTGATC 381
   |||||

QY 276 GGCTCGCTGCTGGTGTATGCGGGGTCAACCCGTTTCGGGTTTCATCGAGACCGCGTACCCG 335
   |||||
Db 380 GGCTCGCTGCTGGTGTATGCGGGGTCAACCCGTTTCGGGTTTCATCGAAGCCCGTACCCG 321
   |||||

QY 336 AAGGTGTGACGGCGGTGTACCGAGAGATCCACTACTGACCGCGACGAGGAGGAC 395
   |||||
Db 320 AAGGTGTGACGGCGGTGTACCGAGAGATCGTGTACCTGACCGCGACGAGGAGGAC 261
   |||||

QY 396 CGCCACGTGTGCGCAGGCGCAACTCGCCGATCGAGACAAAGGCGCGGTTTCGGGAGGCC 455
   |||||
Db 260 CGCCACGTGTGCGCAGGCGCAATTTCGCCGATCGATCGGACGCTGCTTCGTCGAGCCG 201
   |||||

QY 456 CGGGTGTGTCGCCCGCGCAAGGGCGGGCGAGTTCGAGTACGTGCGCTTCGTCGAGGTGAC 515
   |||||
Db 200 CGGGTGTGTCGCCCGCGCAAGGGCGGGCGAGTTCGAGTACGTGCGCTTCGTCGAGGTGAC 141
   |||||

QY 516 TACATGACGTGTGCGCGCGCAGATGTTGTCGGTGGCGCACCGCGATGATCCCGTTCCTC 575
   |||||
Db 140 TACATGACGTGTGCGCGCGCAGATGTTGTCGGTGGCGCACCGCGATGATTCCTTCCTG 81
   |||||

QY 576 GAGCAGCAGCAGCCCAACCGTCCCTGATGGCGGCCAACAATGACGCGCCAGGCGGTCCG 635
   |||||
Db 80 GAGCAGCAGCAGCCCAACCGTCCCTGATGGGGGCAACAATGACGCGCCAGGCGGTGCGG 21
   |||||

QY 636 CTGGTCCGACGAGGCGCC 655
   |||||
Db 20 CTGGTCCGACGAGGCCCC 1
   |||||
```

RESULT 10

```
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
```

```
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

Query Match          75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTTCAGTCTGGGGCGGATCAAGAGGTTCTTCGGCACACCGACGCTGTCC 95
   |||||
Db 1 ATCAACATCCGGCGGTGGTTCGGCGGATCAAGAGGTTCTTCGGCACACCGACGCTGAGC 60
   |||||

QY 96 CAGTTTCATGACAGCAACACCCGCTGTCTGGGCTCAACCAAGCGCCGCTGTGGCG 155
   |||||
Db 61 CAATTTCATGACAGCAACACCCGCTGTCTGGGTTGACCCACAAGCGCCGACTGTGGCG 120
   |||||

QY 156 CTGGGCCCGGGTGGTCTGTCTCCGGAGCGGGCTGGAGGTTCGGCGACGTGCAACCCG 215
   |||||
Db 121 CTGGGGCCCGGGCTGTGTACGTGAGCGTTCGGGGCTGGAGGTTCGGCGACGTGCAACCCG 180
   |||||

QY 216 TCCCACTACGCGCGGATGTCGGGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
   |||||
Db 181 TCCCACTACGCGCGGATGTCGGGATCGAAGCCCTCGAGGGGCCCAACATCGGTCTGATC 240
   |||||

QY 276 GGCTCGCTGCTGCTGTATGCGGGGTCAACCCGTTTCGGGTTTCATCGAGACCGCGTACCCG 335
   |||||
Db 241 GGCTCGCTGCTGCTGTATGCGGGGTCAACCCGTTTCGGGTTTCATCGAAGCCCGTACCCG 300
   |||||

QY 336 AAGGTGTGTCAGCGGTGGTTCACCGACGAGATCCACTACTGACCCCGACGAGGAGGAC 395
   |||||
Db 301 AAGGTGTGTCAGCGGTGGTTCAGCGACGAGATCGTGTACTGACCCCGACGAGGAGGAC 360
   |||||

QY 396 CGCCACGTGTGGCGCAGGCCAACTCGCCGATCGACGACAAAGGCGCGGTTTCGGGAGGCC 455
   |||||
Db 361 CGCCACGTGTGGCGCAGGCCAACTTCGCCGATCGATCGCGGATCGGTTCGTCGAGCGG 420
   |||||

QY 456 CGGGTGTGTCGCCCGCGCAAGGGCGGGCGAGGTTCGAGTACGTGCGCTTCGTCGAGGTGAC 515
   |||||
Db 421 CGGGTGTGTCGCCCGCGCAAGGGCGGGCGAGGTTCGAGTACGTGCGCTTCGTCGAGGTGAC 480
   |||||

QY 516 TACATGACGTGTTCGGCGCGCCAGATGTTGTCGGTGGCGCACCGCGATGATTCCTTCCTC 575
   |||||
Db 481 TACATGACGTGTTCGGCGCGCCAGATGTTGTCGGTGGCGCACCGCGATGATTCCTTCCTC 540
   |||||

QY 576 GAGCAGCAGCAGCCCAACCGTTCCTGATGGCGGCCAACAATGACGCGCCAGGCGGTTCG 635
   |||||
Db 541 GAGCAGCAGCAGCCCAACCGTTCCTTCATGGGGGCAACAATGACGCGCCAGGCGGTTCG 600
   |||||

QY 636 CTGGTCCGACGAGGCGCC 655
   |||||
```

```

Db      601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 11
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-138

Query Match      75.2%; Score 530.4; DB 3; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCAGTCCGCGGATCAAGGAGTTCTTCGGCACACGAGCGTGTCC 95
Db      620 ATCAACATCCGCGGTGTCCGCGATCAAGGAGTTCTTCGGCACACGAGCGTGTCC 561

Qy      96 CAGTTTCATGGACACAGAACCCGCTGTCTGGGGCTCACCCACAAGCGCGCTGTCCGGC 155
Db      560 CAATTTCATGGACACAGAACCCGCTGTCTGGGGTTGACCCACAAGCGCGTGTCCGGC 501

Qy      156 CTGGGCGCGGTGTCTGTCTGGGAGCGGGCGGGCTGGAGGTCCGACGTGACCCG 215
Db      500 CTGGGCGCGCGGTGTGTCTGACGTGAGCGTGTGGGGCTGGAGGTCCGACGTGACCCG 441

Qy      216 TCCTACTAGCGCGGATGTCGCGATCGAGACCCGGAGGTTCCAAATCGGTCTGATC 275
Db      440 TCGACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCAAATCGGTCTGATC 381

Qy      276 GGCTCGCTGTCTGGTGTATCGCGGGGTCAACCCGTTTCGGGTTTCATCGAGACGCCGTACCCG 335
Db      380 GGCTCGCTGTCTGGTGTATCGCGGGGTCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCCG 321

Qy      336 AAGTGGTTCAGCGGTGTGTCTACCGACGAGATCCACTACTGACCGCGACGAGGAGGAC 395
Db      320 AAGTGGTTCAGCGGTGTGTGTAGCGACGAGATCGTGTACTTACCGCGCGACGAGGAGGAC 261

```

```

RESULT 12
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

```

```

Query Match      75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 5.8e-102;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy      36 ATCAACATCCGTCAGTCCGCGGCGGATCAAGGAGTTCTTCGGCACACGAGCGTGTCC 95
Db      1 ATCAACATCCGCGCGGTGTGTCCGCGATCAAGGAGTTCTTCGGCACACGAGCGTGTCC 60

```


Db	541	GAGCAGACAGACGCCAACCGTGCCTCTATGGGGGCAACATGACGCCGCGGTGCGG	60
Qy	636	CTGGTGCAGCAGCGAGCGCC	655
Db	601	CTGGTCCGTAGCGAGGCC	620
RESULT 15			
US-08-757-653-137			
; Sequence 137, Application US/08757653			
; Patent No. 5843669			
; GENERAL INFORMATION:			
; APPLICANT: Kaiser, Michael W.			
; APPLICANT: Lyamichev, Victor I.			
; APPLICANT: Lyamichev, Natasha			
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using			
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases			
; NUMBER OF SEQUENCES: 190			
; CORRESPONDENCE ADDRESS:			
; ADDRESSEE: Medlen & Carroll, LLP			
; STREET: 220 Montgomery Street, Suite 2200			
; CITY: San Francisco			
; STATE: California			
; COUNTRY: United States Of America			
; ZIP: 94104			
; COMPUTER READABLE FORM:			
; MEDIUM TYPE: Floppy disk			
; COMPUTER: IBM PC compatible			
; OPERATING SYSTEM: PC-DOS/MS-DOS			
; SOFTWARE: Patent In Release #1.0, Version #1.30			
; APPLICATION NUMBER: US/08/757,653			
; FILING DATE:			
; CLASSIFICATION: 435			
; ATTORNEY/AGENT INFORMATION:			
; NAME: Ingolia, Diane E.			
; REGISTRATION NUMBER: 40,027			
; REFERENCE/DOCKET NUMBER: FORS-02565			
; TELECOMMUNICATION INFORMATION:			
; TELEPHONE: (415) 705-8410			
; TELEFAX: (415) 397-8338			
; INFORMATION FOR SEQ ID NO: 137:			
; SEQUENCE CHARACTERISTICS:			
; LENGTH: 620 base pairs			
; TYPE: nucleic acid			
; STRANDEDNESS: double			
; TOPOLOGY: linear			
; MOLECULE TYPE: DNA (genomic)			
US-08-757-653-136			
Query Match 75.0%; Score 528.8; DB 2; Length 620;			
Best Local Similarity 90.8%; Pred. No. 1.3e-101;			
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;			
Qy	36	ATCAACATCCGTCCAGTCTGCGGCGATCAAGAGTCTTCGGCACCGACGCTGCC	95
Db	1	ATCAACATCCGCGGTGCTCGCGCGATCAAGAGTCTTCGGCACCGACGCTGAGC	60
Qy	96	CAGTTCATGACAGAACACCGCTGTCGGGGCTCACCAAGCGCGCTGTGCGG	155
Db	61	CAATTATGACAGAACACCGCTGTCGGGGTTGACCCCAAGCGCGCTGTGCGG	120
Qy	96	CAGTTCATGACAGAACACCGCTGTCGGGGCTCACCAAGCGCGCTGTGCGG	155
Db	61	CAATTATGACAGAACACCGCTGTCGGGGTTGACCCCAAGCGCGCTGTGCGG	120
Qy	156	CTGGCGCGGCTGTCTGTCGGGAGCGCGGCTGAGGTCCGCGACGTGCACCG	215
Db	121	CTGGCGCGGCTGTCTGTCGGGAGCGCGGCTGAGGTCCGCGACGTGCACCG	180
Qy	216	TCCCACTACCGCGGATGTGCCGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC	275
Db	181	TCGCACTACCGCGGATGTGCCGATCGAGAACCCCTGAGGGGCCAACATCGTCTGATC	240
Qy	276	GGCTCGTCTGCTGGTGTATGCGGGGTCAACCCGCTTCGGGTTCATCGAAACGCGCTACCGC	335

[illegible]

Db	241	GGCTCGCTGTCGGTGTAGCGCGGGTCAACCCCGTTCCGGTTTCATCGAAGCGCCGTACCGC	300
Qy	336	AAGTGTGTCAGCGCGTGTGTACCGACGAGATCCACTACCTGACCGCCGACGAGGAGAC	395
Db	301	AAGTGTGTCAGCGCGTGTGTAGCGACGAGATCGTGTACCTGACCGCCGACGAGGAGAC	360
Qy	396	CGCCACGTGTGGCGCAGGCCAACTCGCCGATCGACGACAAAGGCGCGTTTCGCGGAGCC	455
Db	361	CGCCACGTGTGGCACAGGCCAATTTCGCCGATCGGACCGTCCGTTCTGTCGAGCCG	420
Qy	456	CGGTGCTGTGTCGCCCGCAAGCGCGGCGAGGTGAGTACGTGCCCCCTCGTCCGAGGTGGAC	515
Db	421	CGGTGCTGTGTCGCCCGCAAGCGCGGCGAGGTGAGTACGTGCCCCCTCGTCTGAGGTGGAC	480
Qy	516	TACATGACGTGTGCCCGCGCGCAGATGCGTGTGCGTGGCCACCGCGATGATCCCGTTCCTC	575
Db	481	TACATGACGTGTGCCCGCGCGCAGATGCGTGTGCGTGGCCACCGCGATGATTCCTTCCTG	540
Qy	576	GAGCACGACGACGCCAACCGTGCCTGATGGGCGCCAAACATGACGCCAGCGGTTCCG	635
Db	541	GAGCACGACGACGCCAACCGTGCCTCATGGGCGCAAAACATGACGCCAGCGGTTCCG	600
Qy	636	CTGGTCCGCGAGCGAGCGCC	655
Db	601	CTGGTCCGTAGCGAGGCCCC	620

Search completed: August 24, 2005, 22:25:21
Job time : 115.459 secs

This Page Blank (uspto)

QY 61 CGATCAAGGAGTTCTTTCCGACACAGCCAGCTGTCCAGATTTCATGGACCAAGCAAAACCCGC 120
 Db |||||
 61 CGATCAAGGAGTTCTTTCCGACACAGCCAGCTGTCCAGATTTCATGGACCAAGCAAAACCCGC 120
 QY 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGCGCTGGGCGCGGTGTGTCTGCCGGG 180
 Db |||||
 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGCGCTGGGCGCGGTGTGTCTGCCGGG 180
 QY 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCACCCGTCCTACGCGCGGATGTGCCGA 240
 Db |||||
 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCACCCGTCCTACGCGCGGATGTGCCGA 240
 QY 241 TCAGACCCCGGAGGTCCTCAACATCGGTCGATCGGCTCGCTGTCCGCTGTATGCCGGG 300
 Db |||||
 241 TCAGACCCCGGAGGTCCTCAACATCGGTCGATCGGCTCGCTGTCCGCTGTATGCCGGG 300
 QY 301 TCACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTCAGCGCGTGTACCG 360
 Db |||||
 301 TCACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTCAGCGCGTGTACCG 360
 QY 361 ACAGATCCACTACCTACCTGACCGCGAGGAGGACCGCACGTTGGCGGAGGCAACT 420
 Db |||||
 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTTGGCGGAGGCAACT 420
 QY 421 CGCGATCGACGACAAAGGCGCGTTCCGCGAGGCGCGGTGTGTCTCCGCGCAAGGCGG 480
 Db |||||
 421 CGCGATCGACGACAAAGGCGCGTTCCGCGAGGCGCGGTGTGTCTCCGCGCAAGGCGG 480
 QY 481 GCGAGTTCAGTACGTCCTCGTCCGAGGTGACTACATGACGTTGTGCCGCGCAGA 540
 Db |||||
 481 GCGAGTTCAGTACGTCCTCGTCCGAGGTGACTACATGACGTTGTGCCGCGCAGA 540
 QY 541 TGGTGTCCGTTGGCCACCGCGATGATCCGTTCTCGAGCACGACGCGCAACCGTGC 600
 Db |||||
 541 TGGTGTCCGTTGGCCACCGCGATGATCCGTTCTCGAGCACGACGCGCAACCGTGC 600
 QY 601 TGATGGCGCCAACTGACGCGCAGCGGTTCCGCTGGTGGCAGGAGCGCGCTGG 660
 Db |||||
 601 TGATGGCGCCAACTGACGCGCAGCGGTTCCGCTGGTGGCAGGAGCGCGCTGG 660
 QY 661 TGGGACCGGCATGGAGCTGCGCGCGCGATGACGCGCGGACGT 705
 Db |||||
 661 TGGGACCGGCATGGAGCTGCGCGCGCGATGACGCGCGGACGT 705

RESULT 2
 US-09-285-306-5
 ; Sequence 5, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 5
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 ; US-09-285-306-5
 Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 8.2e-156;
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CCAGGACGTTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG 60
 |||||

Db 1 CCCAGGACGTTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCACGTCGTGGCGG 60
 QY 61 CGATCAAGGAGTTCTTTCCGACACAGCCAGCTGTCCAGATTTCATGGACCAAGCAAAACCCGC 120
 Db |||||
 61 CGATCAAGGAGTTCTTTCCGACACAGCCAGCTGTCCAGATTTCATGGACCAAGCAAAACCCGC 120
 QY 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGCGCTGGGCGCGGTGTGTCTGCCGGG 180
 Db |||||
 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGCGCTGGGCGCGGTGTGTCTGCCGGG 180
 QY 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCACCCGTCCTACGCGCGGATGTGCCGA 240
 Db |||||
 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCACCCGTCCTACGCGCGGATGTGCCGA 240
 QY 241 TCAGACCCCGGAGGTCCTCAACATCGGTCGATCGGCTCGCTGTCCGCTGTATGCCGGG 300
 Db |||||
 241 TCAGACCCCGGAGGTCCTCAACATCGGTCGATCGGCTCGCTGTCCGCTGTATGCCGGG 300
 QY 301 TCACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTCAGCGCGTGTACCG 360
 Db |||||
 301 TCACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTCAGCGCGTGTACCG 360
 QY 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTTGGCGGAGGCAACT 420
 Db |||||
 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTTGGCGGAGGCAACT 420
 QY 421 CGCGATCGACGACAAAGGCGCGTTCCGCGAGGCGCGGTGTGTCTCCGCGCAAGGCGG 480
 Db |||||
 421 CGCGATCGACGACAAAGGCGCGTTCCGCGAGGCGCGGTGTGTCTCCGCGCAAGGCGG 480
 QY 481 GCGAGTTCAGTACGTCCTCGTCCGAGGTGACTACATGACGTTGTGCCGCGCAGA 540
 Db |||||
 481 GCGAGTTCAGTACGTCCTCGTCCGAGGTGACTACATGACGTTGTGCCGCGCAGA 540
 QY 541 TGGTGTCCGTTGGCCACCGCGATGATCCGTTCTCGAGCACGACGCGCAACCGTGC 600
 Db |||||
 541 TGGTGTCCGTTGGCCACCGCGATGATCCGTTCTCGAGCACGACGCGCAACCGTGC 600
 QY 601 TGATGGCGCCAACTGACGCGCAGCGGTTCCGCTGGTGGCAGGAGCGCGCTGG 660
 Db |||||
 601 TGATGGCGCCAACTGACGCGCAGCGGTTCCGCTGGTGGCAGGAGCGCGCTGG 660
 QY 661 TGGGACCGGCATGGAGCTGCGCGCGCGATGACGCGCGGACGT 705
 Db |||||
 661 TGGGACCGGCATGGAGCTGCGCGCGCGATGACGCGCGGACGT 705

RESULT 3
 US-09-285-306-6
 ; Sequence 6, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 6
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 ; US-09-285-306-6
 Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 8.2e-156;
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CCAGGACGTTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG 60
 |||||

```

Qy 1 CCCAGGACGTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCG 60
Db 1 CCCAGGACGTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCTGTGGCG 60
Qy 61 CGATCAAGGAGTCTTTCGGCACACGAGCGAGTGTCCCAAGTTCATGGACCAAGAACACCCGC 120
Db 61 CGATCAAGGAGTCTTTCGGCACACGAGCGAGTGTCCCAAGTTCATGGACCAAGAACACCCGC 120
Qy 121 TGTGGGGCTCACCAAGGCGCGCTGTGGGGCTGTGGGGCTGTGGGGCTGTGGGGCTGTGGGG 180
Db 121 TGTGGGGCTCACCAAGGCGCGCTGTGGGGCTGTGGGGCTGTGGGGCTGTGGGGCTGTGGGG 180
Qy 181 AGCGGGCGGGCTGAGGTCCGACGTGCACCCGTCACCCGTCACCCGTCACCCGTCACCCGTC 240
Db 181 AGCGGGCGGGCTGAGGTCCGACGTGCACCCGTCACCCGTCACCCGTCACCCGTCACCCGTC 240
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATCGGCTGTGATCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATCGGCTGTGATCGG 300
Qy 301 TCAACCCGTTCCGGTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGGCGTGGTCAACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGGCGTGGTCAACCG 360
Qy 361 ACAGATCCACTACTCGACCGCGAGGAGGAGCGCCACGTCGCTCGCTCGCTCGCTCGCTCG 420
Db 361 ACAGATCCACTACTCGACCGCGAGGAGGAGCGCCACGTCGCTCGCTCGCTCGCTCGCTCG 420
Qy 421 CGCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTCGCTGGTCCGCGCGCAAGCGCG 480
Db 421 CGCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTCGCTGGTCCGCGCGCAAGCGCG 480
Qy 481 GCGAGTTCAGTACGTCCCTCGTCCAGGTGACATGAGACGTGTCGCCCGCGCAGA 540
Db 481 GCGAGTTCAGTACGTCCCTCGTCCAGGTGACATGAGACGTGTCGCCCGCGCAGA 540
Qy 541 TGTGTGCGTGGCCACCGCATGATCCGTTCTCGAGCAGCAGCGCGCGCGCGCGCGCGCG 600
Db 541 TGTGTGCGTGGCCACCGCATGATCCGTTCTCGAGCAGCAGCGCGCGCGCGCGCGCGCG 600
Qy 601 TGATGGCGCGCAACATCGAGCGCGCGCGCGTTCGCTGGTGGCGAGCGCGCGCGCGCGCG 660
Db 601 TGATGGCGCGCAACATCGAGCGCGCGCGCGTTCGCTGGTGGCGAGCGCGCGCGCGCGCG 660
Qy 661 TGGGCAACCGCATGAGCTGGCGCGCGCGATCGACCGCGCGCGT 705
Db 661 TGGGCAACCGCATGAGCTGGCGCGCGCGATCGACCGCGCGCGT 705

```

RESULT 4

```

US-09-285-306-7
; Sequence 7, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-7

```

Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 8.2e-156;

```

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
Db 1 CCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
Qy 61 CGATCAAGGAGTCTTTCGGCACACGAGCGAGTGTCCCAAGTTCATGGACCAAGAACACCCGC 120
Db 61 CGATCAAGGAGTCTTTCGGCACACGAGCGAGTGTCCCAAGTTCATGGACCAAGAACACCCGC 120
Qy 121 TGTGGGGCTCACCAAGGCGCGCTGTGGGGCTGTGGGGCTGTGGGGCTGTGGGGCTGTGGGG 180
Db 121 TGTGGGGCTCACCAAGGCGCGCTGTGGGGCTGTGGGGCTGTGGGGCTGTGGGGCTGTGGGG 180
Qy 181 AGCGGGCGGGCTGAGGTCCGACGTGCACCCGTCACCCGTCACCCGTCACCCGTCACCCGTC 240
Db 181 AGCGGGCGGGCTGAGGTCCGACGTGCACCCGTCACCCGTCACCCGTCACCCGTCACCCGTC 240
Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATCGGCTGTGATCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATCGGCTGTGATCGG 300
Qy 301 TCAACCCGTTCCGGTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGGCGTGGTCAACCG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGGCGTGGTCAACCG 360
Qy 361 ACAGATCCACTACTCGACCGCGAGGAGGAGCGCCACGTCGCTCGCTCGCTCGCTCGCTCG 420
Db 361 ACAGATCCACTACTCGACCGCGAGGAGGAGCGCCACGTCGCTCGCTCGCTCGCTCGCTCG 420
Qy 421 CGCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTCGCTGGTCCGCGCGCAAGCGCG 480
Db 421 CGCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTCGCTGGTCCGCGCGCAAGCGCG 480
Qy 481 GCGAGTTCAGTACGTCCCTCGTCCAGGTGACATGAGACGTGTCGCCCGCGCAGA 540
Db 481 GCGAGTTCAGTACGTCCCTCGTCCAGGTGACATGAGACGTGTCGCCCGCGCAGA 540
Qy 541 TGTGTGCGTGGCCACCGCATGATCCGTTCTCGAGCAGCAGCGCGCGCGCGCGCGCGCG 600
Db 541 TGTGTGCGTGGCCACCGCATGATCCGTTCTCGAGCAGCAGCGCGCGCGCGCGCGCGCG 600
Qy 601 TGATGGCGCGCAACATCGAGCGCGCGCGTTCGCTGGTGGCGAGCGCGCGCGCGCGCGCG 660
Db 601 TGATGGCGCGCAACATCGAGCGCGCGCGTTCGCTGGTGGCGAGCGCGCGCGCGCGCGCG 660
Qy 661 TGGGCAACCGCATGAGCTGGCGCGCGCGATCGACCGCGCGCGT 705
Db 661 TGGGCAACCGCATGAGCTGGCGCGCGCGATCGACCGCGCGCGT 705

```

RESULT 5

```

US-09-285-306-8
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-02
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-8

```

```
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGCGATCACACCGACACCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 1 CCCAGACGTGGAGCGATCACACCGACACCTGATCAACATCCGTCCAGTCGTGGCGG 60

QY 61 CGATCAAGAGTTCCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAAGAAACACCCGC 120
Db 61 CGATCAAGAGTTCCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAAGAAACACCCGC 120

QY 121 TGTGGGGCTACCCCAAGAGCCGCTGTGGCGCTGCGGCCGGGTGTCTGTCCCGGG 180
Db 121 TGTGGGGCTACCCCAAGAGCCGCTGTGGCGCTGCGGCCGGGTGTCTGTCCCGGG 180

QY 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCAACCCGTCCCACTACGGCCGGATGTGCCCGA 240
Db 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCAACCCGTCCCACTACGGCCGGATGTGCCCGA 240

QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCCGTGTATGCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCCGTGTATGCGCGGG 300

QY 301 TCAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGGTGTCGACGGCGTGGTCAACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGGTGTCGACGGCGTGGTCAACCG 360

QY 361 ACGAGATCCACTACCTGACCGCGGACGAGGAGCCGACACGTGTGGCGGACGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGGACGAGGAGCCGACACGTGTGGCGGACGGCCAACT 420

QY 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTGTGGTCCGCGCAAGGGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTGTGGTCCGCGCAAGGGCGG 480

QY 481 GCGAGTTCGAGTACGTGCTCCGAGGTGGAATACATGACGCTGTCCCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTGCTCCGAGGTGGAATACATGACGCTGTCCCGCGCCAGA 540

QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGACCGTGGCC 600
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGACCGTGGCC 600

QY 601 TGATGGGCGCCAACTGACGCGCCAGCGGTTCGCGTGGTGGCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAACTGACGCGCCAGCGGTTCGCGTGGTGGCGAGGCGCGCTGG 660

QY 661 TGGGCAACCGGATGGAGTTCGCGCGCGGCGATCGACGCGCGACGT 705
Db 661 TGGGCAACCGGATGGAGTTCGCGCGCGGCGATCGACGCGCGACGT 705
```

```
RESULT 6
US-09-285-306-9
; Sequence 9, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 9
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
```

```
US-09-285-306-9
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGCGATCACACCGACACCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 1 CCCAGACGTGGAGCGATCACACCGACACCTGATCAACATCCGTCCAGTCGTGGCGG 60

QY 61 CGATCAAGAGTTCCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAAGAAACACCCGC 120
Db 61 CGATCAAGAGTTCCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAAGAAACACCCGC 120

QY 121 TGTGGGGCTACCCCAAGAGCCGCTGTGGCGCTGCGGCCGGGTGTCTGTCCCGGG 180
Db 121 TGTGGGGCTACCCCAAGAGCCGCTGTGGCGCTGCGGCCGGGTGTCTGTCCCGGG 180

QY 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCAACCCGTCCCACTACGGCCGGATGTGCCCGA 240
Db 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCAACCCGTCCCACTACGGCCGGATGTGCCCGA 240

QY 241 TCGAGACCCCGAGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTCCGTGTATGCGCGGG 300
Db 241 TCGAGACCCCGAGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTCCGTGTATGCGCGGG 300

QY 301 TCAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGGTGTCGACGGCGTGGTCAACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGGTGTCGACGGCGTGGTCAACCG 360

QY 361 ACGAGATCCACTACCTGACCGCGGACGAGGAGCCGACACGTGTGGCGGACGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGGACGAGGAGCCGACACGTGTGGCGGACGGCCAACT 420

QY 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTGTGGTCCGCGCAAGGGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTGTGGTCCGCGCAAGGGCGG 480

QY 481 GCGAGTTCGAGTACGTGCTCCGAGGTGGAATACATGACGCTGTCCCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTGCTCCGAGGTGGAATACATGACGCTGTCCCGCGCCAGA 540

QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGACCGTGGCC 600
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGACCGTGGCC 600

QY 601 TGATGGGCGCCAACTGACGCGCCAGCGGTTCGCGTGGTGGCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCAACTGACGCGCCAGCGGTTCGCGTGGTGGCGAGGCGCGCTGG 660

QY 661 TGGGCAACCGGATGGAGTTCGCGCGCGGCGATCGACGCGCGACGT 705
Db 661 TGGGCAACCGGATGGAGTTCGCGCGCGGCGATCGACGCGCGACGT 705
```

```
RESULT 7
US-09-285-306-12
; Sequence 12, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 705
```

```
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-12

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCTGTGCGG 60
Db |||
Qy 1 CCCAGGACGTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCTGTGCGG 60
Db |||
Qy 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCCAAGTTTCATGGACCAAGAACACCCCG 120
Db |||
Qy 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCCAAGTTTCATGGACCAAGAACACCCCG 120
Db |||
Qy 121 TGTCCGGGCTCACCAACAAGCGCCCTGTGCGGCTGGGCGCGGCTGTCTGTCCCGG 180
Db |||
Qy 181 AGCGGGCGGGCTGGAGGTTCGGACGTGCACCGCTCCCACTACGCGCGGATGTGCCCGA 240
Db |||
Qy 181 AGCGGGCGGGCTGGAGGTTCGGACGTGCACCGCTCCCACTACGCGCGGATGTGCCCGA 240
Db |||
Qy 241 TCGAGACCCCGGAGGTCCTCAACATCGTCTGTGATCGGCTCGCTGTGATGCGTGTATGCGCGG 300
Db |||
Qy 241 TCGAGACCCCGGAGGTCCTCAACATCGTCTGTGATCGGCTCGCTGTGATGCGTGTATGCGCGG 300
Db |||
Qy 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGCAAGGTGGTCGACGCGGCTGTCAACCG 360
Db |||
Qy 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGCAAGGTGGTCGACGCGGCTGTCAACCG 360
Db |||
Qy 361 ACAGATTCCTACTACCTGACCGCGA CGAGAGAGACCGCCACGTTGGTGGCGCAGGCCAACT 420
Db |||
Qy 361 ACAGATTCCTACTACCTGACCGCGA CGAGAGAGACCGCCACGTTGGTGGCGCAGGCCAACT 420
Db |||
Qy 421 CGCGATCGAGCACAAGGCGGTTTCGCGAGGCGCGGTTGCTGGTCCGCGCAAGGCGG 480
Db |||
Qy 421 CGCGATCGAGCACAAGGCGGTTTCGCGAGGCGCGGTTGCTGGTCCGCGCAAGGCGG 480
Db |||
Qy 481 GCGAGTTCGAGTACGTCGCTCGTCCGAGTGGACTACATGGACGTGTCCCGCGCCAGA 540
Db |||
Qy 541 TGTGTTCGTTGGCCACCGGATGATCCGTTCTTCGAGCAGCAGCGCAACCGTGCCC 600
Db |||
Qy 541 TGTGTTCGTTGGCCACCGGATGATCCGTTCTTCGAGCAGCAGCGCAACCGTGCCC 600
Db |||
Qy 601 TGATGGGCGCAACATCGACGCGCGGATCGACGCGGCGAGCT 705
Db |||
Qy 601 TGATGGGCGCAACATCGACGCGCGGATCGACGCGGCGAGCT 705
Db |||
Qy 661 TGGGCACCGGATGGAGCTCGCGCGCGGATCGACGCGGCGAGCT 705
Db |||
Qy 661 TGGGCACCGGATGGAGCTCGCGCGCGGATCGACGCGGCGAGCT 705
Db |||
```

```
RESULT 8
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
```

```
; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-13

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCTGTGCGG 60
Db |||
Qy 1 CCCAGGACGTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCTGTGCGG 60
Db |||
Qy 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCCAAGTTTCATGGACCAAGAACACCCCG 120
Db |||
Qy 61 CGATCAAGGAGTCTTTCGGCACCAGCCAGCTGTCCCAAGTTTCATGGACCAAGAACACCCCG 120
Db |||
Qy 121 TGTCCGGGCTCACCAACAAGCGCCCTGTGCGGCTGGGCGCGGCTGTCTGTCCCGG 180
Db |||
Qy 121 TGTCCGGGCTCACCAACAAGCGCCCTGTGCGGCTGGGCGCGGCTGTCTGTCCCGG 180
Db |||
Qy 181 AGCGGGCGGGCTGGAGGTTCGGACGTGCACCGCTCCCACTACGCGCGGATGTGCCCGA 240
Db |||
Qy 181 AGCGGGCGGGCTGGAGGTTCGGACGTGCACCGCTCCCACTACGCGCGGATGTGCCCGA 240
Db |||
Qy 241 TCGAGACCCCGGAGGTCCTCAACATCGTCTGTGATCGGCTCGCTGTGATGCGTGTATGCGCGG 300
Db |||
Qy 241 TCGAGACCCCGGAGGTCCTCAACATCGTCTGTGATCGGCTCGCTGTGATGCGTGTATGCGCGG 300
Db |||
Qy 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGCAAGGTGGTCGACGCGGCTGTCAACCG 360
Db |||
Qy 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGCAAGGTGGTCGACGCGGCTGTCAACCG 360
Db |||
Qy 361 ACAGATTCCTACTACCTGACCGCGA CGAGAGAGACCGCCACGTTGGTGGCGCAGGCCAACT 420
Db |||
Qy 361 ACAGATTCCTACTACCTGACCGCGA CGAGAGAGACCGCCACGTTGGTGGCGCAGGCCAACT 420
Db |||
Qy 421 CGCGATCGAGCACAAGGCGGTTTCGCGAGGCGCGGTTGCTGGTCCGCGCAAGGCGG 480
Db |||
Qy 421 CGCGATCGAGCACAAGGCGGTTTCGCGAGGCGCGGTTGCTGGTCCGCGCAAGGCGG 480
Db |||
Qy 481 GCGAGTTCGAGTACGTCGCTCGTCCGAGTGGACTACATGGACGTGTCCCGCGCCAGA 540
Db |||
Qy 481 GCGAGTTCGAGTACGTCGCTCGTCCGAGTGGACTACATGGACGTGTCCCGCGCCAGA 540
Db |||
Qy 541 TGTGTTCGTTGGCCACCGGATGATCCGTTCTTCGAGCAGCAGCGCAACCGTGCCC 600
Db |||
Qy 541 TGTGTTCGTTGGCCACCGGATGATCCGTTCTTCGAGCAGCAGCGCAACCGTGCCC 600
Db |||
Qy 601 TGATGGGCGCAACATCGACGCGCGGATCGACGCGGCGAGCT 705
Db |||
Qy 601 TGATGGGCGCAACATCGACGCGCGGATCGACGCGGCGAGCT 705
Db |||
Qy 661 TGGGCACCGGATGGAGCTCGCGCGCGGATCGACGCGGCGAGCT 705
Db |||
Qy 661 TGGGCACCGGATGGAGCTCGCGCGCGGATCGACGCGGCGAGCT 705
Db |||
```

```
RESULT 9
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
```

```

; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACCCGACAGCCCTGATCAACATCCGTCAGTCGTGGCGG 60
DB 1 CCCAGAGCTGGAGGCGATCACCCGACAGCCCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGAGTTCTTTCGACCAAGCCAGCTGCCAGTTCATGACCAAGAACACCCGC 120
DB 61 CGATCAAGAGTTCTTTCGACCAAGCCAGCTGCCAGTTCATGACCAAGAACACCCGC 120
QY 121 TGTTCGGGGTTCACCCACAAGCCGCTGTTCGGCGCTGGGCGCGGTGCTGTCCCGGG 180
DB 121 TGTTCGGGGTTCACCCACAAGCCGCTGTTCGGCGCTGGGCGCGGTGCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCGACGTCGACCCGCTCCCACTACGCGCGGATGTGCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCGCGACGTCGACCCGCTCCCACTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTTCGATCGGTTCGATCGGTTCG 300
DB 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTTCGATCGGTTCGATCGGTTCG 300
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCGTACCGCAAGTGTGTCAGCGCGTGGTCA 360
DB 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCGTACCGCAAGTGTGTCAGCGCGTGGTCA 360
QY 361 ACAGATTCACATCTGACCGCGACGAGGAGGACCGCCACGTCGTGTGCGCAGGCGCAACT 420
DB 361 ACAGATTCACATCTGACCGCGACGAGGAGGACCGCCACGTCGTGTGCGCAGGCGCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTGCTGTCGCGCGCAGGCGG 480
DB 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTGCTGTCGCGCGCAGGCGG 480
QY 481 GCGAGTTCGAGTACGTCGCTCGTCGAGGTGGACTACATGACGCTGTGCGCGCGCAGA 540
DB 481 GCGAGTTCGAGTACGTCGCTCGTCGAGGTGGACTACATGACGCTGTGCGCGCGCAGA 540
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGACGCGCAACCGTGCC 600
DB 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGACGCGCAACCGTGCC 600
QY 601 TGAATGGCGCCCAACATGACGAGCGCGGTTCGCGTGTGCGCAGGAGGCGCGCTGG 660
DB 601 TGAATGGCGCCCAACATGACGAGCGCGGTTCGCGTGTGCGCAGGAGGCGCGCTGG 660
QY 661 TGGGCAACCGGCATGAGCTGCGCGCGCGATCGACGCGCGGCGAGT 705
DB 661 TGGGCAACCGGCATGAGCTGCGCGCGCGATCGACGCGCGGCGAGT 705

```

RESULT 10

```

US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285, 306A
; CURRENT FILING DATE: 1999-04-02

```

RESULT 11

```

US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US

```

```

; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-16

```

```

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACCCGACAGCCCTGATCAACATCCGTCAGTCGTGGCGG 60
DB 1 CCCAGAGCTGGAGGCGATCACCCGACAGCCCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGAGTTCTTTCGCGACCCAGCCAGCTGCCAGTTCATGACCAAGAACACCCGC 120
DB 61 CGATCAAGAGTTCTTTCGCGACCCAGCCAGCTGCCAGTTCATGACCAAGAACACCCGC 120
QY 121 TGTTCGGGGTTCACCCACAAGCCGCTGTTCGGCGCTGGGCGCGGTGCTGTCCCGGG 180
DB 121 TGTTCGGGGTTCACCCACAAGCCGCTGTTCGGCGCTGGGCGCGGTGCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCGACGTCGACCCGCTCCCACTACGCGCGGATGTGCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCGCGACGTCGACCCGCTCCCACTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTTCGATCGGTTCGATCGGTTCG 300
DB 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTTCGATCGGTTCGATCGGTTCG 300
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCGTACCGCAAGTGTGTCAGCGCGTGGTCA 360
DB 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCGTACCGCAAGTGTGTCAGCGCGTGGTCA 360
QY 361 ACAGATTCACATCTGACCGCGACGAGGAGGACCGCCACGTCGTGTGCGCAGGCGCAACT 420
DB 361 ACAGATTCACATCTGACCGCGACGAGGAGGACCGCCACGTCGTGTGCGCAGGCGCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTGCTGTCGCGCGCAGGCGG 480
DB 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTGCTGTCGCGCGCAGGCGG 480
QY 481 GCGAGTTCGAGTACGTCGCTCGTCGAGGTGGACTACATGACGCTGTGCGCGCGCAGA 540
DB 481 GCGAGTTCGAGTACGTCGCTCGTCGAGGTGGACTACATGACGCTGTGCGCGCGCAGA 540
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGACGCGCAACCGTGCC 600
DB 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGACGCGCAACCGTGCC 600
QY 601 TGAATGGCGCCCAACATGACGAGCGCGGTTCGCGTGTGCGCAGGAGGCGCGCTGG 660
DB 601 TGAATGGCGCCCAACATGACGAGCGCGGTTCGCGTGTGCGCAGGAGGCGCGCTGG 660
QY 661 TGGGCAACCGGCATGAGCTGCGCGCGCGATCGACGCGCGGCGAGT 705
DB 661 TGGGCAACCGGCATGAGCTGCGCGCGCGATCGACGCGCGGCGAGT 705

```

; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 8.2e-156;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CCCAGGACGTGGAGCGGATCACACCGCAGACCTTGATCAACATCCGTCAGTCCGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGGATCACACCGCAGACCTTGATCAACATCCGTCAGTCCGTGGCGG 60
Qy 61 CGATCAAGGAGTTCTTCGGACACGACGAGCTGTCCAGTTTCATGGACGAGAACACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGACACGACGAGCTGTCCAGTTTCATGGACGAGAACACCCGC 120
Qy 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGCGCTGGGCCCGGGTGTCTGTCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGCGCTGGGCCCGGGTGTCTGTCCGGG 180
Qy 181 AGCGGGCCGGCTGGAGGTTCGGACGTGACACCGCTCCCACTACGGCCGGATGTGCCCGA 240
Db 181 AGCGGGCCGGCTGGAGGTTCGGACGTGACACCGCTCCCACTACGGCCGGATGTGCCCGA 240
Qy 241 TCGAGACCCCGAGGGTCCAAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCAAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCGCGGG 300
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGCAAGGTGCTCGAGCGGTGTACCCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGCAAGGTGCTCGAGCGGTGTACCCG 360
Qy 361 ACAGATCCACTACTGACCGCGACGAGGAGACCGCCACGTCGTCGGTGGCGCAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCGCGACGAGGAGACCGCCACGTCGTCGGTGGCGCAGGCCAACT 420
Qy 421 CGCGGATCGAGCAAGCGCGGTTCCGAGAGCGCGGTCGTCGGTGGCGCAGGCCAACT 480
Db 421 CGCGGATCGAGTACGTCGTCGTCGAGGTGGAATACATGGACGTCGTCGGCGCCAGA 540
Qy 481 GCGAGGTCGAGTACGTCGTCGTCGAGGTGGAATACATGGACGTCGTCGGCGCCAGA 540
Db 481 GCGAGGTCGAGTACGTCGTCGTCGAGGTGGAATACATGGACGTCGTCGGCGCCAGA 540
Qy 541 TGTGTCCGTCGGCCACCGGATGATCCGTTCTTCGAGACGACGACGCGCAACCGTCCCG 600
Db 541 TGTGTCCGTCGGCCACCGGATGATCCGTTCTTCGAGACGACGACGCGCAACCGTCCCG 600
Qy 601 TGTATGGCGCAACATCGACGCGCGGTTCCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660
Db 601 TGTATGGCGCAACATCGACGCGCGGTTCCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660
Qy 661 TGGGCAACCGCATGGAGCTGGCGCGCGGATCGACGCGGCGACT 705
Db 661 TGGGCAACCGCATGGAGCTGGCGCGCGGATCGACGCGGCGACT 705

RESULT 12
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

Query Match 99.8%; Score 703.4; DB 9; Length 705;
Best Local Similarity 99.9%; Pred. No. 1.9e-155;
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCTTGATCAACATCCGTCAGTCCGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCTTGATCAACATCCGTCAGTCCGTGGCGG 60
Qy 61 CGATCAAGGAGTTCTTCGGCACCGCAGCGCTGTCCAGTTTCATGGACGAGAACACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCGCAGCGCTGTCCAGTTTCATGGACGAGAACACCCGC 120
Qy 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGCGCTGGGCCCGGGTGTCTGTCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGCGCTGGGCCCGGGTGTCTGTCCGGG 180
Qy 181 AGCGGGCCGGCTGGAGGTTCGGACGTGACACCGCTCCCACTACGGCCGGATGTGCCCGA 240
Db 181 AGCGGGCCGGCTGGAGGTTCGGACGTGACACCGCTCCCACTACGGCCGGATGTGCCCGA 240
Qy 241 TCGAGACCCCGAGGGTCCAAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCAAACATCGGTCTGATCGGCTCGCTGTGGTGTATGCGCGGG 300
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGCAAGGTGCTCGAGCGGTGTACCCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGCAAGGTGCTCGAGCGGTGTACCCG 360
Qy 361 ACAGATCCACTACTGACCGCGACGAGGAGACCGCCACGTCGTCGGTGGCGCAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCGCGACGAGGAGACCGCCACGTCGTCGGTGGCGCAGGCCAACT 420
Qy 421 CGCGGATCGAGCAAGCGCGGTTCCGAGAGCGCGGTCGTCGGTGGCGCAGGCCAACT 480
Db 421 CGCGGATCGAGCAAGCGCGGTTCCGAGAGCGCGGTCGTCGGTGGCGCAGGCCAACT 480
Qy 481 GCGAGTTCGAGTACGTCGTCGTCGAGGTGGAATACATGGACGTCGTCGGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTCGTCGTCGAGGTGGAATACATGGACGTCGTCGGCGCCAGA 540
Qy 541 TGTGTCCGTCGGCCACCGGATGATCCGTTCTTCGAGACGACGACGCGCAACCGTCCCG 600
Db 541 TGTGTCCGTCGGCCACCGGATGATCCGTTCTTCGAGACGACGACGCGCAACCGTCCCG 600
Qy 601 TGTATGGCGCAACATCGACGCGCGGTTCCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660
Db 601 TGTATGGCGCAACATCGACGCGCGGTTCCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660
Qy 661 TGGGCAACCGCATGGAGCTGGCGCGCGGATCGACGCGGCGACT 705
Db 661 TGGGCAACCGCATGGAGCTGGCGCGCGGATCGACGCGGCGACT 705

RESULT 13
US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas

APPLICANT: Drenkow, Jorg
APPLICANT: Affymetrix, Inc.
TITLE OF INVENTION: Mycobacterial rpoB Sequences
FILE REFERENCE: 018547-018570US
CURRENT APPLICATION NUMBER: US/09/285,306A
CURRENT FILING DATE: 1999-04-02
EARLIER APPLICATION NUMBER: US 60/080,616
EARLIER FILING DATE: 1998-04-03
NUMBER OF SEQ ID NOS: 181
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 3
LENGTH: 705
TYPE: DNA
ORGANISM: Mycobacterium avium
FEATURE:
NAME/KEY: modified base
LOCATION: (525)...(525)
OTHER INFORMATION: n = g,a,c or t
FEATURE:
NAME/KEY: modified base
LOCATION: (650)...(650)
OTHER INFORMATION: n = g,a,c or t
US-09-285-306-3

Query Match 98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 1.8e-153;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGGATCACACCGAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
DB 1 CCAGAGCTGGAGGGATCACACCGAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
QY 61 CGATCAAGGAGTCTTCGGCACCAGCCAGCTGCCAGTTCATGGACCAGAACACCCGC 120
DB 61 CGATCAAGGAGTCTTCGGCACCAGCCAGCTGCCAGTTCATGGACCAGAACACCCGC 120
QY 121 TGTCCGGGCTCACCCCAAGCGCGCTGTTCGGCGCTGGCGCCGGTGTCTGTCCCGGG 180
DB 121 TGTCCGGGCTCACCCCAAGCGCGCTGTTCGGCGCTGGCGCCGGTGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGGAGTCACCCGACCCCTGATCCGTCCTGATGCGGTATGCGCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCGGAGTCACCCGACCCCTGATCCGTCCTGATGCGGTATGCGCCGA 240
QY 241 TCAGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTCCGGTGTACGCGCGGG 300
DB 241 TCAGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTCCGGTGTACGCGCGGG 300
QY 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGGTTGTCACCG 360
DB 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGGTTGTCACCG 360
QY 361 ACAGATTCATCTGACCGCGAGAGAGACCGCCACCTGCTGGTGGCGAGGCCAACT 420
DB 361 ACAGATTCATCTGACCGCGAGAGAGACCGCCACCTGCTGGTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACACAAGGGCCGTTCCGAGAGCCCGGTTCCGAGAGCCCGGTTCCGAGAGCCCG 480
DB 421 CGCCGATCGACACAAGGGCCGTTCCGAGAGCCCGGTTCCGAGAGCCCGGTTCCGAGAGCCCG 480
QY 481 GCGAGGTCGAGTACGTCGCCCTCGTCCGAGGTGAGTACATGAGAGTGTCCGCGCGCAGA 540
DB 481 GCGAGGTCGAGTACGTCGCCCTCGTCCGAGGTGAGTACATGAGAGTGTCCGCGCGCAGA 540
QY 541 TGTGTCTGGTGGCCACCGCGATGATCCGTTCTCGAGACGACGAGCCGACCCGTCGCC 600
DB 541 TGTGTCTGGTGGCCACCGCGATGATCCGTTCTCGAGACGACGAGCCGACCCGTCGCC 600
QY 601 TGATGGGCGCAACATGACGCGGTCGCTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 660
DB 601 TGATGGGCGCAACATGACGCGGTCGCTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 660
QY 661 TGGGACCCGCGATGGAGTGTCCGCGCGCGATCGACGCGCGACGT 705

DB 661 TGGGACCCGCGATGGAGTGTCCGCGCGCGATCGACGCGCGACGT 705
RESULT 14
US-09-285-306-11
Sequence 11, Application US/09285306A
Publication No. US20020187467A1
GENERAL INFORMATION:
APPLICANT: Gingeras, Thomas
APPLICANT: Drenkow, Jorg
APPLICANT: Affymetrix, Inc.
TITLE OF INVENTION: Mycobacterial rpoB Sequences
FILE REFERENCE: 018547-018570US
CURRENT APPLICATION NUMBER: US/09/285,306A
CURRENT FILING DATE: 1999-04-02
EARLIER APPLICATION NUMBER: US 60/080,616
EARLIER FILING DATE: 1998-04-03
NUMBER OF SEQ ID NOS: 181
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 11
LENGTH: 705
TYPE: DNA
ORGANISM: Mycobacterium avium
FEATURE:
NAME/KEY: modified base
LOCATION: (42)...(42)
OTHER INFORMATION: n = g,a,c or t
FEATURE:
NAME/KEY: modified base
LOCATION: (692)...(692)
OTHER INFORMATION: n = g,a,c or t
US-09-285-306-11

Query Match 98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 4.3e-153;
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGGATCACACCGAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
DB 1 CCAGAGCTGGAGGGATCACACCGAGACCCCTGATCAACATCCGTCCAGTCTGGCGG 60
QY 61 CGATCAAGGAGTCTTCGGCACCAGCCAGTTCGCCAGTTCATGACCAAGAACACCCGC 120
DB 61 CGATCAAGGAGTCTTCGGCACCAGCCAGTTCGCCAGTTCATGACCAAGAACACCCGC 120
QY 121 TGTCCGGGCTCACCCCAAGCGCGCTGTTCGGCGCTGGCGCCGGTGTCTGTCCCGGG 180
DB 121 TGTCCGGGCTCACCCCAAGCGCGCTGTTCGGCGCTGGCGCCGGTGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGGAGTCGCCGACCCCTGATCCGTCCTGATGCGGTATGCGCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCGGAGTCGCCGACCCCTGATCCGTCCTGATGCGGTATGCGCCGA 240
QY 241 TCAGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTCCGGTGTACGCGCGGG 300
DB 241 TCAGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTCCGGTGTACGCGCGGG 300
QY 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGGTTGTCACCG 360
DB 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGGTTGTCACCG 360
QY 361 ACAGATTCATCTGACCGCGAGAGAGACCGCCACCTGCTGGTGGCGAGGCCAACT 420
DB 361 ACAGATTCATCTGACCGCGAGAGAGACCGCCACCTGCTGGTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACACAAGGGCCGTTCCGAGAGCCCGGTTCCGAGAGCCCGGTTCCGAGAGCCCG 480
DB 421 CGCCGATCGACACAAGGGCCGTTCCGAGAGCCCGGTTCCGAGAGCCCGGTTCCGAGAGCCCG 480
QY 481 GCGAGGTCGAGTACGTCGCCCTCGTCCGAGGTGAGTACATGAGAGTGTCCGCGCGCAGA 540
DB 481 GCGAGGTCGAGTACGTCGCCCTCGTCCGAGGTGAGTACATGAGAGTGTCCGCGCGCAGA 540

QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCGCCAAACCGTGGC 600
 Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCGCCAAACCGTGGC 600
 QY 601 TGATGGGCGCCAAACATGCGAGCGCAGCGGTTCCGCTGGTGGCGAGCGAGCGCCGCTGG 660
 Db 601 TGATGGGCGCCAAACATGCGAGCGCAGCGGTTCCGCTGGTGGCGAGCGAGCGCCGCTGG 660
 QY 661 TGGGCAACCGGCATGAGCTGCGCGCGCGCATGACACGCGCGACGT 705
 Db 661 TGGGCAACCGGCATGAGCTGCGCGCGCGCATGACACGCGCGACGT 705

RESULT 15

US-09-285-306-10
 ; Sequence 10, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gengeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Afymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 10
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;
 Best Local Similarity 98.0%; Pred. No. 1.6e-152;
 Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;
 QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCCGTCCAGTCCGTGGCGG 60
 Db 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCCGTCCCGTGGCGG 60
 QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGCCAGTTCTATGGACCAACACCCCG 120
 Db 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGCCAGTTCTATGGACCAACACCCCG 120
 QY 121 TGTCCGGGCTCACCCACNAGCGCGCTGTCCGGCGTGGCGCGGTGCTGTCCCGGG 180
 Db 121 TGTCCGGGCTTGACCCCAAGCGCGCTGTCCGGCGTGGCGCGGTGCTGTCCCGGG 180
 QY 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCACCCGTCACACTACCGCCGATGTGCCGA 240
 Db 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCACCCGTCACACTACCGCCGATGTGCCGA 240
 QY 241 TCAGAGACCCCGGAGGTCCCAACATCCGTTGATCGGCTCGCTGTATGCGCGGG 300
 Db 241 TCAGAGACCCCGGAGGTCCCAACATCCGTTGATCGGCTCGCTGTATGCGCGGG 300
 QY 301 TCAGACCGGTCGGGTTTCATCGAGACCGCTTACCGAAGGTGGTTCGACGCGGTGTCACCG 360
 Db 301 TSAACCCGTTCCGGTTTCATCGAGACCCGTTACCGAAGGTGGTTCGACGCGGTGTCACCG 360
 QY 361 ACAGATCCACTACCTGACCGCGCAGAGGAGACCGCCACGTTGGTGGCGCGGCCAACT 420
 Db 361 ACAGATCCACTACCTGACCGCGCAGAGGAGACCGCCACGTTGGTGGCGCGGCCAACT 420
 QY 421 CGCCGATCGACGACAAAGGGCGGTTCGCGAGGCCCGGTGCTGGTCCGCGCAAGCGG 480
 Db 421 CGCCGATCGACGACAAAGGGCGGTTCGAGGAGKCCCGGTGCTGGTCCGCGCAAGCGG 480
 QY 481 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTGAGTACATGGAGCTGTCCGCGCCAGA 540

Db 481 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTGAGTACATGGAGCTGTCCGCGCCAGA 540
 QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCGCCAAACCGTGGC 600
 Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCGCCAAACCGTGGC 600
 QY 601 TGATGGGCGCCAAACATGCGAGCGCAGCGGTTCCGCTGGTGGCGAGCGAGCGCCGCTGG 660
 Db 601 TGATGGGCGCCAAACATGCGAGCGCAGCGGTTCCGCTGGTGGCGAGCGAGCGCCGCTGG 660
 QY 661 TGGGCAACCGGCATGAGCTGCGCGCGCGCATGACACGCGCGACGT 705
 Db 661 TGGGCAACCGGCATGAGCTGCGCGCGCGCATGACACGCGCGACGT 705

Search completed: August 25, 2005, 11:35:38
 Job time : 452.661 secs

This Page Blank (usp10)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 20:29:20 ; Search time 103.459 Seconds
(without alignments)
11150.034 Million cell updates/sec

Title: US-09-285-306-10

Perfect score: 705

Sequence: 1 ccagagcgtgagcgatc.....ggcgatcgacggcgacgt 705

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA:*

- 1: /cgn2_6/prodata/1/ina/5A_COMB.seq:*
- 2: /cgn2_6/prodata/1/ina/5B_COMB.seq:*
- 3: /cgn2_6/prodata/1/ina/6A_COMB.seq:*
- 4: /cgn2_6/prodata/1/ina/6B_COMB.seq:*
- 5: /cgn2_6/prodata/1/ina/PTUS_COMB.seq:*
- 6: /cgn2_6/prodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	606.6	86.0	706	3	US-08-797-812-24
2	599	85.0	4403765	3	US-09-103-840A-2
3	599	85.0	4411529	3	US-09-103-840A-1
4	563.8	80.0	3447	2	US-08-313-185-57
5	563.8	80.0	3447	1	US-08-082-614A-57
6	536.4	76.1	970	1	US-08-250-030-1
7	536.4	76.1	970	5	PCT-US95-06790-1
8	526.4	74.7	620	2	US-08-757-653-135
9	526.4	74.7	620	2	US-08-757-653-138
10	526.4	74.7	620	3	US-08-520-946-135
11	526.4	74.7	620	3	US-08-520-946-138
12	526.4	74.7	620	4	US-09-655-378A-135
13	526.4	74.7	620	4	US-09-655-378A-138
14	524.8	74.4	620	2	US-08-757-653-136
15	524.8	74.4	620	2	US-08-757-653-137
16	524.8	74.4	620	2	US-08-757-653-139
17	524.8	74.4	620	2	US-08-757-653-140
18	524.8	74.4	620	3	US-08-520-946-136
19	524.8	74.4	620	3	US-08-520-946-137
20	524.8	74.4	620	3	US-08-520-946-139
21	524.8	74.4	620	3	US-08-520-946-140
22	524.8	74.4	620	4	US-09-655-378A-136
23	524.8	74.4	620	4	US-09-655-378A-137
24	524.8	74.4	620	4	US-09-655-378A-139
25	524.8	74.4	620	4	US-09-655-378A-140
26	460.6	65.3	706	3	US-08-797-812-25
27	415.8	59.0	5099	4	US-09-887-052-1

28	414.2	58.8	5099	4	US-09-887-052-3	Sequence 3, Appli
29	414.2	58.8	5099	4	US-09-887-052-5	Sequence 5, Appli
30	396.8	56.3	4227	4	US-09-902-540-8919	Sequence 8919, Ap
31	396.8	56.3	9367	4	US-09-902-540-951	Sequence 951, App
32	373.2	52.9	4074	4	US-09-252-991A-4737	Sequence 4737, Ap
33	373.2	52.9	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
34	338	47.9	4083	4	US-09-489-039A-22	Sequence 22, Appl
35	338	47.9	4206	4	US-09-489-039A-30	Sequence 30, Appl
36	291.8	41.4	432	2	US-08-313-185-59	Sequence 59, Appl
37	291.8	41.4	432	3	US-09-082-614A-59	Sequence 59, Appl
38	279	39.6	324	3	US-08-750-088A-36	Sequence 36, Appl
39	279	39.6	324	4	US-09-722-319-36	Sequence 36, Appl
40	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
41	264	37.4	2964	4	US-09-540-236-1097	Sequence 1097, Ap
42	264	37.4	31063	4	US-09-596-002-20	Sequence 20, Appl
43	250.8	35.6	1830121	4	US-09-557-884-1	Sequence 1, Appli
44	250.8	35.6	1830121	4	US-09-643-990A-1	Sequence 1, Appli
45	250.4	35.5	319	3	US-08-750-088A-35	Sequence 35, Appl

ALIGNMENTS

RESULT 1

US-08-797-812-24

/ Sequence 24, Application US/08797812

/ Patent No. 6228575

/ GENERAL INFORMATION:

/ APPLICANT: Gingeras, Thomas A.

/ APPLICANT: Mack, David

/ APPLICANT: Chee, Mark S.

/ APPLICANT: Berno, Anthony J.

/ APPLICANT: Stryer, Lubert

/ APPLICANT: Ghandour, Ghassan

/ APPLICANT: Wang, Ching

/ TITLE OF INVENTION: Chip-Based Species Identification and

/ TITLE OF INVENTION: Phenotypic Characterization of Microorganisms

/ NUMBER OF SEQUENCES: 36

/ CORRESPONDENCE ADDRESS:

/ ADDRESSEE: Townsend and Townsend and Crew LLP

/ STREET: Two Embarcadero Center, 8th Floor

/ CITY: San Francisco

/ STATE: CA

/ COUNTRY: USA

/ ZIP: 94111

/ COMPUTER READABLE FORM:

/ MEDIUM TYPE: Floppy disk

/ COMPUTER: IBM PC compatible

/ OPERATING SYSTEM: PC-DOS/MS-DOS

/ SOFTWARE: PatentIn Release #1.0, Version #1.30

/ CURRENT APPLICATION DATA:

/ APPLICATION NUMBER: US/08/797,812

/ FILING DATE: 07-FEB-1997

/ CLASSIFICATION: 435

/ PRIOR APPLICATION DATA:

/ APPLICATION NUMBER: US 60/017,765

/ FILING DATE: 15-MAY-1996

/ PRIOR APPLICATION DATA:

/ APPLICATION NUMBER: US 08/629,031

/ FILING DATE: 08-APR-1996

/ PRIOR APPLICATION DATA:

/ APPLICATION NUMBER: US 60/012,631

/ FILING DATE: 01-MAR-1996

/ PRIOR APPLICATION DATA:

/ APPLICATION NUMBER: US 60/011,339

/ FILING DATE: 08-FEB-1996

/ ATTORNEY/AGENT INFORMATION:

/ NAME: Fitts, Renee A.

/ REGISTRATION NUMBER: 35,136

/ REFERENCE/DOCKET NUMBER: 16528X-018550

/ TELECOMMUNICATION INFORMATION:

/ TELEPHONE: 415-326-2400

/ TELEFAX: 415-326-2422

; APPLICANT: FLEISCHMAN, Robert D.							
; APPLICANT: WHITE, Owen K.							
; APPLICANT: FRASER, Claire M.							
; APPLICANT: VENTER, John C.							
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM							
; TITLE OF INVENTION: TUBERCULOSIS							
; FILE REFERENCE: 24366-20007.00							
; CURRENT APPLICATION NUMBER: US/09/103,840A							
; CURRENT FILING DATE: 1998-06-24							
; NUMBER OF SEQ ID NOS: 2							
; SOFTWARE: PatentIn Ver. 2.1							
; SEQ ID NO 1							
; LENGTH: 4411529							
; TYPE: DNA							
; ORGANISM: Mycobacterium tuberculosis							
; OTHER INFORMATION: H37RV							
US-09-103-840A-1							
Query Match 85.0%; Score 599; DB 3; Length 4411529;							
Best Local Similarity 90.4%; Pred. No. 3,7e-115;							
Matches 632; Conservative 6; Mismatches 61; Indels 0; Gaps 0;							
Qy	1	CCCAGGACGTGGAGCGCATCACCGCAGACCTTGCATCAACATCCGTCRCGTGCTGGCGG	60				
Db	761003	CCCAGGACGTGGAGCGCATCACCGCAGAGCGTTGATCAACATCCGCGCGGTGGTGC	60				
Qy	61	CGATCAAGGAGTTCCTTCGGCACCGACCAGCTGTCCCAGTTCATTGACACGAAACACCCGC	120				
Db	761063	CGATCAAGGAGTTCCTTCGGCACCGACCAGCTGTGAGCCAATTCATTGGACGAGAACAACCCGC	761122				
Qy	121	TGTCGGGTCTGACCCACCAAGCGCCGCTGTTCGGCTCGGGCCCGGGTGCTCTGTCCCCGGG	180				
Db	761123	TGTCGGGTCTGACCCACCAAGCGCCGACTGTTCGGCTCGGGCCCGGGTGCTGTACACGTG	761182				
Qy	181	AGCGGCCGCGCTCGAGGTCGGTGACGTGCACCCGTCSCACTACGCGCGGATGTGCCGA	240				
Db	761183	AGCGTGC CGGCTCGAGGTC CGGCGACGTGCACCCGCTCGCACTACGCGCGGATGTGCCGA	761242				
Qy	241	TCGAGACCCCGGAGGGTCCCAACATCCGTCTGTAGTCGGCTCGCTGTCGGTGTA	300				
Db	761243	TCGAACCCCTCGAGGGGCCAACATCCGTCTGTATCGGCTCGCTGTGCGGTGTACGGCGGG	761302				
Qy	301	TSAAACCCGCTTCGGGTTCATCGAGACCCCGTAGCCGCAAGGTGGTCGACGGTGTGTCACCG	360				
Db	761303	TCAAACCCGCTTCGGGTTCATCGAAACGCGCTACCGCAAGGTGGTCGACGGGTGGTTAGCG	761362				
Qy	361	ACGAGATCCACTACTGTGACCCCGACGAGGAGGACCGCCACGTSGTGGCGCAGGCCAACT	420				
Db	761363	ACGAGATCGTGTA CTGACCGCCGACGAGGAGGACCGCCACGTGGTGGCA CAGGCCAA TT	761422				
Qy	421	CGCCGATCGACACAAAGGGCCGGTTTCGAGGAGKCCCGGGTGCTGTGTCGCGCSAAGGCGG	480				
Db	761423	CGCCGATCGATCGCGACGGTCTGCTTCGTGAGCCGCGCGTGCTGTGTCGCGCAAGGCGG	761482				
Qy	481	GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA	540				
Db	761483	GCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA	761542				
Qy	541	TGTTGTCGTTGGCCACCGCGATGATCCGTTCTCTCGAGCAGCAGACGCCCAACCGTGCC	600				
Db	761543	TGTTGTCGTTGGCCACCGCGATGATTCCTTTCTTCGTGAGCAGCAGACGCCCAACCGTGCC	761602				
Qy	601	TGATGGGCGCCAAATGACGCGCCAGGGCGTTTCGCTGTCGACGAGGCGCGCGCTGG	660				
Db	761603	TCATGGGGGCAAAATGACGAGCGCCAGCGGTGCGCTGTCGTTAGCAGGAGCGCGCTGG	761662				
Qy	661	TGGGCAACGGCATGGAGTCTGCGCGCGCGCATCGACGCGG	699				
Db	761663	TGGGCAACGGGATGGAGTCTGCGCGCGCGCATCGACGCGG	761701				

RESULT 4

US-08-313-185-57

```

; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-313-185-57

```

Query Match	80.0%;	Score 563.8;	DB 2;	Length 3447;
Best Local Similarity	87.3%;	Pred. No. 3.2e+08;		
Matches 610;	Conservative 6;	Mismatches 183;	Indels 0;	Gaps 0;
Qy 1	CCGAGACGTGGAGGCGATCACACCGCAGACCTGTGATCAATCCGTCRGTGCTGCGCGG 60			
Db 1124	CCGAGACGTGGAGGCGATCACCGCGAGACGCTGATCAATATCCGTCGCGGTGTGCGCGG 1183			
Qy 61	CGATCAAGGAGTTCTTTCCGCACACGACGAGCTGTCCAGATTTCATGGACACGAAACAACCCGC 120			
Db 1184	CTATCAAGGNAITCTTGGCACACGACGAGCTGTGCGAGTTTCATGGATCATGAACAACCCCTC 1243			
Qy 121	TGTCGGGTCTGACCCACAAGCGCGCGCTGTGCGCGCTGGGCCCGCGGTGTCTGTCCCGGG 180			
Db 1244	TGTCGGGCTTGACCCACAAGCGCGCGCTGTGCGCGCTGGGCCCGCGGTGTCTGTCCGCGTG 1303			
Qy 181	AGCGGCGCGGCTTGGAGGTCCGTGAGTGCACCGCTCSCACTACGCCCGGATGTGCCCGA 240			
Db 1304	AGGTCGCGGGCTTAGAGGTCCGTGAGTGCACCCCTTCGCACTACGCCCGGATGTGCCCGA 1363			
Qy 241	TCGAGACCCCGGAGGGTCCCAAATCCGGTCTGATCGGCTCGCTGTCCGTTGTAYCGCGCGGG 300			
Db 1364	TCGAGACTCCGAGGGCCCGGAAATAGGTTCTGATCGGTTCAATGTCCGTTGTACGCGCGGG 1423			
Qy 301	TSAAACCGGTTTCGGGTTTCATCGAGACCCCGTACCGCAAGGTGGTGCAGCGTGTGGTCAACG 360			
Db 1424	TCAAACCCCTTCGGGTTTCATCGAAACACCGTACCGCAAGGTGGTGTGACCGTGTGGTCAAGC 1483			

```
QY 361 ACAGATCCACTACCTGACCGCCGACGAGGACCGCCACGTCGTGCGCAGGCGCAACT 420
DB 1484 ACAGATCGAATACTTGACCGCTGACGAGGACCGCCATGTCGTGGCGAGGCGCAACT 1543
QY 421 CCGCATCGACGACAAAGGCGCGGTTCGAGGAGKCCCGGTGCTGTCGCCGCGSAAAGCGG 480
DB 1544 CCGCATCGACGAGGCGCGCGTTCCTCGAGCGCGCGTGTGGGTGCGCGCAAGCGG 1603
QY 481 GCGAGTCCAGTACCTGCGCTCGTCCGAGGTGGAATACATGATGTCGCGCGCCCGCA 540
DB 1604 GCGAGTCCAGTACCTGCGCTCGTCCGAGGTGGAATACATGATGTCGCGCGCCCGCA 1663
QY 541 TGGTGTGCGTCCGACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCCGACCGTGC 600
DB 1664 TGGTGTGCGTCCGACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCCGACCGTGC 1723
QY 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCGCTGGTGGCAGAGGCGCGCGTGG 660
DB 1724 TGATGGGCGCTAACATGACGCGCCAGGCGGTTCGCTGGTGGCAGAGCAGCGTGG 1783
QY 661 TGGGACCGGATGAGTGGCGCGCGGATCGACGCGG 699
DB 1784 TGGGACCGGATGAGTGGCGCGCGGATCGACGCTG 1822
```

RESULT 5

```
US-09-082-614A-57
; Sequence 57, Application US/09082614A
; Patent No. 6124098
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESS: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/082,614A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/313,185
; FILING DATE: 12-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
```

```
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-09-082-614A-57
```

Query Match 80.0%; Score 563.8; DB 3; Length 3447;

Best Local Similarity 87.3%; Pred. No. 3.2e-108;
Matches 610; Conservative 6; Mismatches 83; Indels 0; Gaps 0;

```
QY 1 CCCAGGACGTGGAGCGGATCACACCGGACCCCTGATCAACATCCGTCCTCGTGGCGG 60
DB 1124 CCCAGGACGTGGAGCGGATCACCGCGGACGCTGATCAATATCCGTCGCGTGGCGG 1183
QY 61 CGATCAAGGAGTCTTTCGGCACCAAGCCAGCTGTCCCAGTTCATGGAACAGAACCCGC 120
DB 1184 CTATCAAGGATTTCTTCGGCACCAAGCCAGCTGTCCGAGTTTCATGGATCAGAAACCCCTC 1243
QY 121 TGTGGGTCTGACCCACAGCGCCGCTGTTCGGCGCTGGGCGCGGTGCTGTTCGCGGG 180
DB 1244 TGTGGGCGCTGACCCACAGCGCGGCTGTTCGGCGCTGGGCGCGGTGCTGTTCGCGGTG 1303
QY 181 AGCGGCGCGGCTGGAGGTCCGTGACGTGCAACCCGCTGCACTACGCGCGGATGTGCCCGA 240
DB 1304 AGCGTGGCGGCTAGAGGTTCGTGACGTGCAACCCCTTCGACTACGCGCGGATGTGCCCGA 1363
QY 241 TCGAGACCCCGGAGGTCCTCCAAATCCGTCTGATCGGCTCGCTGTTCGCTGTGAYGCGGG 300
DB 1364 TCGAGACTCCGGAGGCGCGGAAACATAGTCTGTGATCGGTTTCAATTGTCGCTGTGACGCGG 1423
QY 301 TSAACCGTTTCGGGTTCATCGAGACCCCGTACCCGAGGTGTCGACGCTGTGTCACCG 360
DB 1424 TCAACCCCTTCGGGTTCATCGAAACACCGTACCCGCAAGTGTGACGCTGTGTCAGCG 1483
QY 361 ACAGATCCACTACCTGACCGCGCAGGAGGACCGCACGTCGTGTCGCGCAGGCGCAACT 420
DB 1484 ACAGATCGAATACTTGACCGCTGACGAGGAGACCGCCATGTCGTGGCGCAGGCGCAACT 1543
QY 421 GCGCATCGACGACAAAGGCGCGGTCGAGGAGKCCCGGTGCTGTCGCCGCGSAAAGCGG 480
DB 1544 GCGCATCGACGAGGCGCGCGTTCCTCGAGCGCGCGTGTGGGTGTCGCGCGCAAGCGG 1603
QY 481 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTGGAATACATGATGTCGCGCGCGCCAGA 540
DB 1604 GCGAGTCCAGTACGTGCGCTCGTCCGAGGTGGAATACATGATGTCGCGCGCGCCAGA 1663
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCCGACCGTGC 600
DB 1664 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCCGACCGTGC 1723
QY 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCGCTGGTGGCAGGAGGCGCGCGTGG 660
DB 1724 TGATGGGCGCTAACATGACGCGCCAGGCGGTTCGCTGGTGGCAGGAGCAGCGTGG 1783
QY 661 TGGGACCGGATGAGTGGCGCGCGGATCGACGCGG 699
DB 1784 TGGGACCGGATGAGTGGCGCGCGGATCGACGCTG 1822
```

RESULT 6

```
US-08-250-030-1
; Sequence 1, Application US/08250030
; Patent No. 5643723
; GENERAL INFORMATION:
; APPLICANT: Persing, David H.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in
; TITLE OF INVENTION: Clinical Specimens
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
```


Db 701 ACGAGATCGTGTACTGACCGCCGACGAGGAGGACCGCCACGTCGTGTGGCAGACAGGCCAATT 760
Qy 421 CGCCGATCGACGACAAAGGCGCGGTTTCGAGGAGKCCCGGGTCTGTCTCGCCGSAAGGCGG 480
Db 761 CGCCGATCGATCGGACCGGTCTGTCTGAGCCCGCGGTCTGTCTCGCCGCAAGGCGG 820
Qy 481 GCGAGGTGAGTGTGTCCTGTCGTCGAGGTGGAATACATGGAACGTGTGCGCGGCCAGA 540
Db 821 GCGAGGTGAGTGTGTCCTGTCGTCGAGGTGGAATACATGGAACGTGTGCGCGGCCAGA 880
Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCGTTCTCGAGCAGACGACCCGACCGTGCCC 600
Db 881 TGGTGTCCGTGGCCACCGCGATGATTCCTTCTCGAGCAGACGACCGCCAAACCGTGCCC 940
Qy 601 TGATGGCGCCAAACATGACGAGCCAGGCGG 630
Db 941 TCATGGGGGCAACATGACGCGCCAGGCGG 970

RESULT 8

US-08-757-653-135
; Sequence 135, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-135

Query Match 74.7%; Score 526.4; DB 2; Length 620;
Best Local Similarity 89.8%; Pred. No. 1.5e-100;
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;
Qy 36 ATCAACATCCGTCCRGTCGTGGCGCGATCAAGGAGTTCTTCGGCACCGACGAGTGTCC 95
Db 1 ATCAACATCCGCGCGGTGTCGCGCGATCAAGGAGTTCTTCGGCACCGACGAGTGTGAGC 60
Qy 96 CAGTTCATGGACCAAGAAACCCGCTGTCCGCTCTGACCCACAGCGCGGCTGTCCGCG 155
Db 61 CAATTTCATGGACCAAGAAACCCGCTGTCCGCGTTGACCCCAAGCGCGGCTGTCCGCG 120

Qy 156 CTGGCCCGGGTGTCTGTCTCCGGGACGGGCCCGGCTCGAGGTCCTGTGACGTGCACCCG 215
Db 121 CTGGGGCCCGGGTGTCTGTCTACGTGAGGTGCGGGGTTCGAGGTTCGCGACGTGCACCCG 180
Qy 216 TCSCACTACGGCCGGATGTGCCCGATCGAGACCCCGGAGGTTCCTCAACATCGGTCTGATC 275
Db 181 TCGCACTACGGCCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
Qy 276 GGCTCGCTGTCCGTGTAYGCGCGGTTNACCCGTTTCGGGTTTCATCGAGACCCCGTACCGC 335
Db 241 GGCTCGCTGTCCGTGTACGCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACCCCGTACCGC 300
Qy 336 AAGTGTGTTCGACGCGTGTTCACCGACGAGATCCACTACCTGACCGCGCGACGAGGAGGAC 395
Db 301 AAGTGTGTTCGACGCGTGTTCGACGAGATCGTGTACCTGACCGCGCGACGAGGAGGAC 360
Qy 396 CGCCACGTGTGCGCAGGCCAACTCCGCCGATCGACGACGAAGGGCCGGTTCGAGGAGKCC 455
Db 361 CGCCACGTGTGCGCAGGCCAAATTCGCCGATCGATCGGACGGTCGCTTCGTCGAGCGC 420
Qy 456 CGGCTGTGTCTCCGCGSAAAGCGGGGAGGTTCGAGTACGTGACCTCGTCCGAGGTGAC 515
Db 421 CGGCTGTGTCTCCGCGCAAGGCGGGGAGGTTCGAGTACGTGACCTCGTCCGAGGTGAC 480
Qy 516 TACATGACGTGTCCGCGCCGACAGATGTTGCGGTGGCCACCGCGATGATCCCGTTCCTC 575
Db 481 TACATGACGTGTCTCGCCCCCGACAGATGTTGCGGTGGCCACCGCGATGATTCCTCTG 540
Qy 576 GAGCAGCAGCAGCCAAACCGTGCCTGTGATGGCGCCCAACATGACGCGCGAGCGGTTCG 635
Db 541 GAGCAGCAGCAGCCAAACCGTGCCTCATGCGGGGCAAAACATGACGCGCGAGCGGTTCG 600
Qy 636 CTGGTGGCGCAGGAGCGCC 655
Db 601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 9

US-08-757-653-138/c
; Sequence 138, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:


```
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; TOPOLOGY: single
; STRANDEDNESS: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match          74.7%; Score 526.4; DB 2; Length 620;
Best Local Similarity 89.8%; Pred. No. 1.5e-100;
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCRCGTCTGCGCGGATCAAGAGTCTTCGCGACCAAGCCAGCTGTCC 95
Db 620 ATCAACATCCGCGCGGTGTGCGCGGATCAAGAGTCTTCGCGACCAAGCCAGCTGAGC 561

QY 96 CAGTTTCATGACACAGAACACCGCTGTGCGGTCTTGACCCCAAGCCGCGCTGTGCGGG 155
Db 560 CAATTTCATGACACAGAACACCGCTGTGCGGTCTTGACCCCAAGCCGCGCTGTGCGGG 501

QY 156 CTGGGCGCGGGTGTCTGTCCGGAGCGGGCGCGCTGGAGGTTCGTGACGTGACACCG 215
Db 500 CTGGGCGCGGGTGTCTGTGACGTGAGCGTGTGCGGGCTGGAGGTTCGTGACCGTGCACCG 441

QY 216 TCSACTACGCGCGGATGTCGCGATCGAGACCCCGGAGGTCCCAACATCGGTCTGATC 275
Db 440 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

QY 276 GCGTCGCTCTCGGTGTGAYCGCGGGTSAACCGTTTCGGGTTCATCGAGACCCCGTACCGC 335
Db 380 GACTCGCTCTCGGTGTGAYCGCGGGTSAACCGTTTCGGGTTCATCGAAACCGCGTACCGC 321

QY 336 AAGTGTGTGACGCGGTGTGTCACCGAGATCCACTACTGACCGCGGACGAGGAGAC 395
Db 320 AAGTGTGTGACGCGGTGTGTCACCGAGATCCGTGACTGACCGCGGACGAGGAGAC 261

QY 396 CGCCACGTSGTGCGCGAGCCAACTCGCGGATCGACCAAGCGCGGTTCGAGGAGKCC 455
Db 260 CGCCACGTSGTGCGCGAGCCAACTCGCGGATCGACCAAGCGCGGTTCGTCGAGCGG 201

QY 456 CGGCTGTCTGTCGCGCGGAGCGCGGAGTGTGAGTACGTCGCTCTGTCGAGGTGGAC 515
Db 200 CGGCTGTCTGTCGCGCGGAGCGCGGAGTGTGAGTACGTCGCTCTGTCGAGGTGGAC 141

QY 516 TACATGAGCGTGTGCGCGCGCAGATGCTGTGCGGTGGCCACCGCGATGATCCGTTCTTC 575
Db 140 TACATGAGCGTGTGCGCGCGCAGATGCTGTGCGGTGGCCACCGCGATGATCCGTTCTTC 81

QY 576 GAGCAGCAGCAGCCAACTGTCGCTGATGGCGGCCCAACATGACGCGCAGGCGGTTCG 635
Db 80 GAGCAGCAGCAGCCAACTGTCGCTGATGGCGGCCCAACATGACGCGCAGGCGGTTCG 21

QY 636 CTGCTGCGCAGCGAGGCGCC 655
Db 20 CTGCTGCGTACGAGGCGCC 1
```

RESULT 10

```
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; NUMBER OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSER: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
```

```
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-135
```

```
Query Match          74.7%; Score 526.4; DB 3; Length 620;
Best Local Similarity 89.8%; Pred. No. 1.5e-100;
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCRCGTCTGCGCGGATCAAGAGTCTTCGCGACCAAGCCAGCTGTCC 95
Db 1 ATCAACATCCGCGCGGTGTGCGCGGATCAAGAGTCTTCGCGACCAAGCCAGCTGAGC 60

QY 96 CAGTTTCATGACACAGAACACCGCTGTGCGGTCTTGACCCCAAGCGCGCTGTGCGGG 155
Db 61 CAATTTCATGACACAGAACACCGCTGTGCGGTCTTGACCCCAAGCGCGCTGTGCGGG 120

QY 156 CTGGGCGCGGGTGTCTGTCCCGGAGCGCGCGCTCGGAGGTTCGTGACGTGACACCG 215
Db 121 CTGGGCGCGGGTGTCTGTACAGTGTGCGCGGTTCGAGGTTCGCGAGCTGTGACCG 180

QY 216 TCSACTACGCGCGGATGTCGCGATCGAGACCCCGGAGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

QY 276 GCGTCGCTCTCGGTGTGAYCGCGGGTSAACCGTTTCGGGTTCATCGAGACCCCGTACCGC 335
Db 241 GCGTCGCTCTCGGTGTGAYCGCGGGTSAACCGTTTCGGGTTCATCGAAACCGCGTACCGC 300

QY 336 AAGTGTGTGACGCGGTGTGTCACCGAGATCCACTACTGACCGCGGACGAGGAGAC 395
Db 301 AAGTGTGTGACGCGGTGTGTCACCGAGATCCGTGACTGACCGCGGACGAGGAGAC 360

QY 396 CGCCACGTSGTGCGCGAGCCAACTGTCGCGGATCGACCAAGCGCGGTTCGAGGAGKCC 455
Db 361 CGCCACGTSGTGCGCGAGCCAACTGTCGCGGATCGACCAAGCGCGGTTCGTCGAGCGC 420

QY 456 CGGCTGTCTGTCGCGCGGAGCGCGGAGTGTGAGTACGTCGCTCTGTCGAGGTGGAC 515
Db 421 CGGCTGTCTGTCGCGCGGAGCGCGGAGTGTGAGTACGTCGCTCTGTCGAGGTGGAC 480

QY 516 TACATGAGCGTGTGCGCGCGCAGATGCTGTGCGGTGGCCACCGCGATGATCCGTTCTTC 575
Db 481 TACATGAGCGTGTGCGCGCGCAGATGCTGTGCGGTGGCCACCGCGATGATTCCTTCCTG 540

QY 576 GAGCAGCAGCAGCCAACTGTCGCTGATGGCGGCCCAACATGACGAGCGCAGGCGGTTCG 635
Db 541 GAGCAGCAGCAGCCAACTGTCGCTGATGGCGGCCCAACATGACGAGCGCAGGCGGTTCG 600

QY 636 CTGCTGCGCAGCGAGGCGCC 655
Db 636 CTGCTGCGCAGCGAGGCGCC 655
```

```
Db 601 CTGGTCCGTAGCAGGCCCCC 620

RESULT 11
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-138

Query Match 74.7%; Score 526.4; DB 3; Length 620;
Best Local Similarity 89.8%; Pred. No. 1.5e-100;
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCRCGTGCGCGCGATCAAGGAGTTCTTCGGCACCGACGCTGTCC 95
Db 620 ATCAACATCCGCGCGTGTGCGCCGATCAAGGAGTTCTTCGGCACCGACGCTGAGC 561

Qy 96 CAGTTATGAGACAGAAACAACCGCTGTGGGTCTGACCCACAAGCGCGCGCTGTGCGCG 155
Db 560 CAATTATGAGACAGAAACAACCGCTGTGGGTGACCCACAAGCGCGCGCTGTGCGCG 501

Qy 156 CTGGCGCGCGGTGCTCTGCTCCGGGAGCGCGCGCGCTGGAGTCCGTGAGTGCACCGG 215
Db 500 CTGGGGCGCGCGGTGCTGTGACGTGAGCGTGCAGGCTGCGGAGTCCGCGACCGG 441

Qy 216 TCSACTACGGCCGGATGTGCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 440 TCGCACTAGCGCGGATGTGCCGATCGAACCCTTGAGGGGCCCAACATCGGTCTGATC 381

Qy 276 GGCTCGCTGTGCGGTATGCGCGGTTAAACCGTTTCGGTTTCATCGAGCCCGTACCGG 335
Db 380 GGCTCGCTGTGCGGTATGCGCGGTTAAACCGTTTCGGTTTCATCGAAGCCGCGTACCGG 321

Qy 336 AAGTGGTTCGAGGTGTGGTACCGAGGATCCACTACCTACCGCGCGAGGAGGAC 395
Db 320 AAGTGGTTCGAGGTGTGGTACCGAGGATCGTGTACCTGACCGCGCGAGGAGGAC 261

US-09-285-306-10.rni

Qy 396 CGCCACGTSGTGGCGCAGGCCAACTCGCCGATCGACGACAAAGGCGCGGTTTCGAGGAKCC 455
Db 260 CGCCACGTSGTGGCGCAGGCCAACTCGCCGATCGATCGGACGGTTCGTCGAGCGG 201

Qy 456 CGGGTGTGTTCCCGCGSAAAGCGGGGAGGTCAAGTACGTGCGCTCTCGAGGTGAGC 515
Db 200 CGCGTGTGTTCCCGCGCAAGCGGGGAGGTACGTGCGCTCTCGAGGTGAGC 141

Qy 516 TACATGGACGTGTCCCGCGCCAGATGTTGCGTGGCCACGCGGATGATCCCGTTCTC 575
Db 140 TACATGGACGTGTCCCGCGCCAGATGTTGCGTGGCCACGCGGATGATTCCTTCCTG 81

Qy 576 GAGCACGACGACGCGCAACCGTGCCCTGATGGCGCGCAACATCGACGCGCGGTTCCG 635
Db 80 GAGCACGACGACGCGCAACCGTGCCCTCATGGGGGCAACATCGACGCGCGGTTCCG 21

Qy 636 CTGGTGGCGCAGGAGCGCC 655
Db 20 CTGGTGGCGCAGGAGCGCC 1

RESULT 12
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match 74.7%; Score 526.4; DB 4; Length 620;
Best Local Similarity 89.8%; Pred. No. 1.5e-100;
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCRCGTGCGCGCGATCAAGGAGTTCTTCGGCACCGACGCTGTCC 95
Db 1 ATCAACATCCGCGCGGTGTCGCGCGATCAAGGAGTTCTTCGGCACCGACGCTGAGC 60
```

```

QY 96 CAGTTTCATGACGACGACGCGCTGTGCGGTCTGACCCACAAAGGCGCGCTGTGCGG 155
Db 61 CAATTTCATGACGACGACGCGCTGTGCGGTCTGACCCACAAAGGCGCGCTGTGCGG 120
QY 156 CTGGGCGCGGCTGTGCTGCTGCGGAGCGGCGCGCTGTGAGGCTCGTGACGTGCACCG 215
Db 121 CTGGGCGCGGCTGTGCTGCTGCGGAGCGGCGCGCTGTGAGGCTCGTGACGTGCACCG 180
QY 216 TCSCACTACGCGCGGATGTCGCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCSCACTACGCGCGGATGTCGCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 240
QY 276 GCGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 335
Db 241 GCGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 300
QY 336 AAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 395
Db 301 AAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 360
QY 396 CGCCACGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 455
Db 361 CGCCACGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 420
QY 456 CGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 515
Db 421 CGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 480
QY 516 TACATGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 575
Db 481 TACATGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 540
QY 576 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 635
Db 541 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 600
QY 636 CTGGTCCGAGCGAGCGGCC 655
Db 601 CTGGTCCGAGCGAGCGGCC 620

```

RESULT 13

US-09-655-378A-138/c
; Sequence 138, Application US/09655378A
; Patent No. 6673616

GENERAL INFORMATION:

APPLICANT: BROW, MARY ANN D.
LYAMICHEV, VICTOR I.
OLIVE, DAVID M.
TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
PATHOGENS

NUMBER OF SEQUENCES: 165

CORRESPONDENCE ADDRESS:
ADDRESSEE: MEDLEN & CARROLL
STREET: 220 MONTGOMERY STREET, SUITE 2200
CITY: SAN FRANCISCO
STATE: CALIFORNIA
COUNTRY: UNITED STATES OF AMERICA
ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/655,378A
FILING DATE: 05-Sep-2000
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: CARROLL, PETER G.
REGISTRATION NUMBER: 32,837
REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 138:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
SEQUENCE DESCRIPTION: SEQ ID NO: 138:
US-09-655-378A-138

Query Match 74.7%; Score 526.4; DB 4; Length 620;
Best Local Similarity 89.8%; Pred. No. 1.5e-100;
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

```

QY 36 ATCAACATCCCGTGTGCTGCGCGGATCAAGAGGTTCTTCGGGCACCAAGCCAGCTGTCC 95
Db 620 ATCAACATCCCGGCGGTGTGCGCGGATCAAGAGGTTCTTCGGGCACCAAGCCAGCTGAC 561
QY 96 CAGTTTCATGACGACGACGCGCTGTGCGGTCTGACCCACAAAGGCGCGCTGTGCGG 155
Db 560 CAATTTCATGACGACGACGCGCTGTGCGGTCTGACCCACAAAGGCGCGCTGTGCGG 501
QY 156 CTGGGCGCGGCTGTGCTGCTGCGGAGCGGCGCGCTGTGAGGCTCGTGACGTGCACCG 215
Db 500 CTGGGCGCGGCTGTGCTGCTGCGGAGCGGCGCGCTGTGAGGCTCGTGACGTGCACCG 441
QY 216 TCSCACTACGCGCGGATGTCGCGGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 440 TCSCACTACGCGCGGATGTCGCGGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 381
QY 276 GCGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 335
Db 380 GCGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 321
QY 336 AAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 395
Db 320 AAGTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 261
QY 396 CGCCACGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 455
Db 260 CGCCACGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 201
QY 456 CGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 515
Db 200 CGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 141
QY 516 TACATGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 575
Db 140 TACATGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 81
QY 576 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 635
Db 80 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 21
QY 636 CTGGTCCGAGCGAGCGGCC 655
Db 20 CTGGTCCGAGCGAGCGGCC 1

```

RESULT 14

US-09-757-653-136
; Sequence 136, Application US/08757653
; Patent No. 5843669
GENERAL INFORMATION:
APPLICANT: Kaiser, Michael W.
APPLICANT: Lyamichev, Victor I.
APPLICANT: Lyamichev, Natasha
TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
Thermostable FEN-1 Endonucleases
NUMBER OF SEQUENCES: 190

```
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 136:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-136

Query Match          74.4%; Score 524.8; DB 2; Length 620;
Best Local Similarity 89.7%; Pred. No. 3.3e-100;
Matches 556; Conservative 6; Mismatches 58; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCRGTGTCGGCGCGATCAAGAGGTTCTTCGGCACCGACGCTGTCC 95
DB 1 ATCAACATCCGCGCGGTGTGTCGCCGATCAAGAGGTTCTTCGGCACCGACGCTGAGC 60
QY 96 CAGTTTCATGGACCAAGAACACCCGTCGTGGGTCTGACCCCAAGCGCGCGCTGTCCGG 155
DB 61 CAATTTCATGGACCAAGAACACCCGTCGTGGGTCTGACCCCAAGCGCGCGCTGTTCGG 120
QY 156 CTGGGCGCGGTGTGTCGCCGCGAGCGCGCTTGGAGTTCCTGAGCTGCGTGCACCCG 215
DB 121 CTGGGCGCGCGGTGTGTCACGTAGCTGCCGGCTTGGAGTTCGCGACGTCGACCCG 180
QY 216 TCSCACTACGCGCGGATGTGCCCGATCGAGACCCCGGAGGTGCCAATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGCTGTGGGTGTAGCGCGGTSAACCGGTTCGGGTTCATCGAGACCCCGTACCGC 335
```

```
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 137:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-137

Query Match          74.4%; Score 524.8; DB 2; Length 620;
Best Local Similarity 89.7%; Pred. No. 3.3e-100;
Matches 556; Conservative 6; Mismatches 58; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCRGTGTCGGCGCGATCAAGAGGTTCTTCGGCACCGACGCTGTCC 95
DB 1 ATCAACATCCGCGCGGTGTGTCGCCGATCAAGAGGTTCTTCGGCACCGACGCTGAGC 60
QY 96 CAGTTTCATGGACCAAGAACACCCGTCGTGGGTCTGACCCCAAGCGCGCGCTGTCCGG 155
DB 61 CAATTTCATGGACCAAGAACACCCGTCGTGGGTCTGACCCCAAGCGCGCGCTGTTCGG 120
QY 156 CTGGGCGCGGTGTGTCGCCGCGAGCGCGCTTGGAGTTCCTGAGCTGCGTGCACCCG 215
DB 121 CTGGGCGCGCGGTGTGTCACGTAGCTGCCGGCTTGGAGTTCGCGACGTCGACCCG 180
QY 216 TCSCACTACGCGCGGATGTGCCCGATCGAGACCCCGGAGGTGCCAATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGCTGTGGGTGTAGCGCGGTSAACCGGTTCGGGTTCATCGAGACCCCGTACCGC 335
```

Db	241	GGCTCGCTCGGTACGCGCGGGTCAACCCGTTGGGTTTCATCGAAACGCCGTACCGC	300
Qy	336	AAGGTGGTCGACGGTGTGTACCGACGAGATCCACTACTGACCGCCGACGAGAGGAC	395
Db	301	AAGGTGGTCGACCGCGTGGTTAGCGACGAGATCGTGTACCTGACCGCCGACGAGAGGAC	360
Qy	396	CGCCACGTSGTGGCGCAGGCCAACTCGCCGATCGACGACAAGGGCGGGTTCGAGGAGKCC	455
Db	361	CGCCACGTTGGTGGCACAGGCCAAATTCGCCGATCGATGCGGACGGTTCGTCGAGCCG	420
Qy	456	CGGGTCTCGTCCGCGSAAAGCGGGGAGGTGAGTACGTGCGCCCTCGTCCGAGGTGGAC	515
Db	421	CGCGTGTCTGTCGCGCGCAAGCGGCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC	480
Qy	516	TACATGGACGTGTCGCGCGCCGACAGATGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTC	575
Db	481	TACATGGACGTCTCGCGCCCGCAGATGGTGTGCGTGGCCACCGCGATGATCCCTTCCTG	540
Qy	576	GAGCAGCAGCGACGCCAACCGTGCCCTGATGGGCGCCAAACATGCGCGCCAGCGGGTTCGG	635
Db	541	GAGCAGCAGCGACGCCAACCGTGCCCTCATGGGGGCAACATGCGCGCCAGCGGGTTCGG	600
Qy	636	CTGGTGGCGCAGCGAGCGCC	655
Db	601	CTGGTCCGTAGCGAGGCCCC	620

Search completed: August 24, 2005, 22:25:34
Job time : 116.459 secs

This Page Blank (usp10)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 24, 2005, 21:58:55 ; Search time 451.661 Seconds
(without alignments)
10213.139 Million cell updates/sec

Title: US-09-285-306-10
Perfect score: 705
Sequence: 1 ccaggagctggagcgatc.....ggcgatcgagcgcgagct 705

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 7331713 seqs, 327154945 residues

Total number of hits satisfying chosen parameters: 14663426

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

- Database :
- 1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq.*
 - 2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq.*
 - 3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq.*
 - 4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq.*
 - 5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq.*
 - 6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq.*
 - 7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq.*
 - 8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq.*
 - 9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq.*
 - 10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq.*
 - 11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq.*
 - 12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq.*
 - 13: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq.*
 - 14: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq.*
 - 15: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq.*
 - 16: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq.*
 - 17: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq.*
 - 18: /cgn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq.*
 - 19: /cgn2_6/ptodata/1/pubpna/US10G_PUBCOMB.seq.*
 - 20: /cgn2_6/ptodata/1/pubpna/US10H_PUBCOMB.seq.*
 - 21: /cgn2_6/ptodata/1/pubpna/US10I_PUBCOMB.seq.*
 - 22: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq.*
 - 23: /cgn2_6/ptodata/1/pubpna/US11A_PUBCOMB.seq.*
 - 24: /cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq.*
 - 25: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq.*
 - 26: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	ID	Description
1	702.2	99.6	705	US-09-285-306-10
2	691	98.0	705	Sequence 10, Appli
3	691	98.0	705	Sequence 4, Appli
4	691	98.0	705	Sequence 5, Appli
5	691	98.0	705	Sequence 6, Appli
6	691	98.0	705	Sequence 7, Appli
7	691	98.0	705	Sequence 8, Appli
			705	Sequence 9, Appli

8	691	98.0	705	9	US-09-285-306-12	Sequence 12, Appl
9	691	98.0	705	9	US-09-285-306-13	Sequence 13, Appl
10	691	98.0	705	9	US-09-285-306-14	Sequence 14, Appl
11	691	98.0	705	9	US-09-285-306-16	Sequence 16, Appl
12	691	98.0	705	9	US-09-285-306-24	Sequence 24, Appl
13	689.4	97.8	705	9	US-09-285-306-17	Sequence 17, Appl
14	683	96.9	705	9	US-09-285-306-3	Sequence 3, Appli
15	683	96.9	705	9	US-09-285-306-11	Sequence 11, Appl
16	677	96.0	3444	17	US-10-282-122A-25737	Sequence 25737, A
17	675	95.7	705	9	US-09-285-306-87	Sequence 87, Appl
18	675	95.7	705	9	US-09-285-306-88	Sequence 88, Appl
19	675	95.7	705	9	US-09-285-306-90	Sequence 90, Appl
20	675	95.7	705	9	US-09-285-306-92	Sequence 92, Appl
21	675	95.7	705	9	US-09-285-306-96	Sequence 96, Appl
22	673.4	95.5	705	9	US-09-285-306-84	Sequence 84, Appl
23	673.4	95.5	705	9	US-09-285-306-86	Sequence 86, Appl
24	673.4	95.5	705	9	US-09-285-306-93	Sequence 93, Appl
25	673.4	95.5	705	9	US-09-285-306-94	Sequence 94, Appl
26	673.4	95.5	705	9	US-09-285-306-95	Sequence 95, Appl
27	673	95.5	687	9	US-09-285-306-18	Sequence 18, Appl
28	673	95.5	687	9	US-09-285-306-19	Sequence 19, Appl
29	673	95.5	687	9	US-09-285-306-20	Sequence 20, Appl
30	673	95.5	687	9	US-09-285-306-21	Sequence 21, Appl
31	673	95.5	687	9	US-09-285-306-22	Sequence 22, Appl
32	673	95.5	687	9	US-09-285-306-23	Sequence 23, Appl
33	673	95.5	687	9	US-09-285-306-25	Sequence 25, Appl
34	673	95.5	687	9	US-09-285-306-27	Sequence 27, Appl
35	671.8	95.3	705	9	US-09-285-306-85	Sequence 85, Appl
36	671.8	95.3	705	9	US-09-285-306-89	Sequence 89, Appl
37	671.8	95.3	705	9	US-09-285-306-91	Sequence 91, Appl
38	668.6	94.8	705	9	US-09-285-306-143	Sequence 143, App
39	667	94.6	705	9	US-09-285-306-144	Sequence 144, App
40	657	93.2	687	9	US-09-285-306-100	Sequence 100, App
41	655.8	93.0	705	9	US-09-285-306-181	Sequence 181, App
42	655.4	93.0	687	9	US-09-285-306-99	Sequence 99, Appl
43	653.8	92.7	687	9	US-09-285-306-98	Sequence 98, Appl
44	652.2	92.5	687	9	US-09-285-306-97	Sequence 97, Appl
45	650.6	92.3	687	9	US-09-285-306-146	Sequence 146, App

ALIGNMENTS

RESULT 1
US-09-285-306-10
; Sequence 10, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0 .
; SEQ ID NO 10
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-10

Query Match	99.6%	Score 702.2	DB 9	Length 705
Best Local Similarity	100.0%	Pred. No. 7.8e-156		
Matches	705	Conservative	0	Mismatches 0; Indels 0; Gaps 0;
Qy	1	CCGAGGAGCTGGAGGCGATCACACCGAGACCTGATCAACATCCGTCCGTGTCGGCGG	60	
Db	1	CCGAGGAGCTGGAGGCGATCACACCGAGACCTGATCAACATCCGTCCGTGTCGGCGG	60	

	Qy	1	CCGAGACGTGAGGGCGATCACACGCAGACCTTGATCAACATCCGTTCBGTCTGTTGGCGG	60
	Db	1	CCGAGACGTGAGGGCGATCACACGCAGACCTTGATCAACATCCGTTCBGTCTGTTGGCGG	60
	Qy	61	CGATCAAGAGTCTTTCCGCCACACGACAGCTGTCCAGTTTCATGGACACAGAACAACC	120
	Db	61	CGATCAAGAGTCTTTCCGCCACACGACAGCTGTCCAGTTTCATGGACACAGAACAACC	120
	Qy	121	TGTCGGGTCTGACCCACAAAGCCGCCCTGTTCGGCGCTGGCCCGGGTGGTCTGTCTCCCGG	180
	Db	121	TGTCGGGGTCTACCCACAAAGCCGCCCTGTTCGGCGCTGGCCCGGGTGGTCTGTCTCCCGG	180
	Qy	181	AGCGGGCCGGCCTGGAGTTCGTGAGTGTGCACCGTCSACTACGGCCGGAATGTCGCCA	240
	Db	181	AGCGGGCCGGGCTGGAGTTCGCAGTGTGCACCGCTCCCATACTACGGCCGGAATGTCGCCA	240
	Qy	241	TCGAGACCCCGGAGGTTCCAAATCTGGTCTGATCGGCTCGCTGCTGCTGTATTCGGCGGG	300
	Db	241	TCGAGACCCCGGAGGGTCCAAATCTGGTCTGATTCGGCTCGCTGCTGCTGTATTCGGCGGG	300
	Qy	301	TSAAACCCGTTTCGGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACGSGTGGTCA	360
	Db	301	TCAAACCCGTTTCGGGTTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGCGGTCA	360
	Qy	361	ACGAGATCCACTACTCTGACCGCCGACGAGGAGZACCGCACGTSGTGGCGCAGGCCAAC	420
	Db	361	ACGAGATCCACTACTCTGACCGCCGACGAGGAGZACCGCACGTSGTGGCGCAGGCCAAC	420
	Qy	421	CGCCGATCGACACAAAGGCCCGGTTTCGAGGAGKCCCGGGTGTCTGGTTCGCCGSAAGCGG	480
	Db	421	CGCCGATCGACACAAAGGCCCGGTTTCGCGGAGGCCCGGGTGTCTGGTTCGCCGSAAGCGG	480
	Qy	481	GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAGCTGTCCGCGCGCCAGA	540
	Db	481	GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAGCTGTCCGCGCGCCAGA	540
	Qy	541	TGTTGTTCGGTGGCCACCGCGATGATCCCGTTTCCTCGACGACGACGCCAACCGTGCCC	600
	Db	541	TGTTGTTCGGTGGCCACCGCGATGATCCCGTTTCCTCGACGACGACGCCAACCGTGCCC	600
	Qy	601	TGATGGGCCCAACATGACAGGCCAAGGCGGTTCCGCTTGGTGGCAGCGAGGCCGCGTGG	660
	Db	601	TGATGGGCCCAACATGACAGGCCAAGGCGGTTCCGCTTGGTGGCAGCGAGGCCGCGTGG	660
	Qy	661	TGGGCACCGGCATGGAGCTGCGCGGGCGATTCGACGGCGGACGT	705
	Db	661	TGGGCACCGGCATGGAGCTGCGCGGGCGATTCGACGGCGGACGT	705

RESULT 4

```

US-09-285-306-6
; Sequence 6, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial
; FILE REFERENCE: 019547-019570US
; CURRENT APPLICATION NUMBER: US/09/285
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/0
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Versi
; SEQ ID NO 6
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-6

```

Query Match	98.0%;	Score 691;	DB 9;	Length 705;
Best Local Similarity	98.0%;	Pred. No. 3.3e-153;		

RESULT 5

```

US-09-285-306-7
; Sequence 7, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-7

```



```

; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-9

Query Match      98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3.3e-153;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTTCRGTCGTGGCGG 60
Db 1 CCAGAGCTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTTCAGTCGTGGCGG 60
QY 61 CGATCAAGAGTCTTTCGGCACCAGCAGCTGTCCAGTTCATGACACAGACCAACCCGC 120
Db 61 CGATCAAGAGTCTTTCGGCACCAGCAGCTGTCCAGTTCATGACACAGACCAACCCGC 120
QY 121 TGTGGGTCTGACCCACAAAGCGCCGCTGTCCGCGCTGGGCGGCTGTGTCCCGG 180
Db 121 TGTGGGTCTGACCCACAAAGCGCCGCTGTCCGCGCTGGGCGGCTGTGTCCCGG 180
QY 181 AGCGGCCCGGCTGGAGGTCGATCGCTGACGTCACCCCTGTCACCTACCGCCGATGTGCCGA 240
Db 181 AGCGGCCCGGCTGGAGGTCGATCGCTGACGTCACCCCTGTCACCTACCGCCGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCGGTGTATGCGCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCGGTGTATGCGCGG 300
QY 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGTGACAGGTGTGGTCAACG 360
Db 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGTGACAGGTGTGGTCAACG 360
QY 361 ACGAGATCCACTACTGACCGCGCAGAGGAGACCGCCACGTSGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCGCGCAGAGGAGACCGCCACGTSGTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGCGTTCGAGAGKCCCGGCTGTGTCGCCGSAAGGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTCGAGAGKCCCGGCTGTGTCGCCGSAAGGCGG 480
QY 481 GCGAGTTCGAGTACGTGCGCTCGTCCGAGTGGACTACATGACAGCTGTGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTGCGCTCGTCCGAGTGGACTACATGACAGCTGTGCGCGCCAGA 540
QY 541 TGGTGTGCGTGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCAACCGTGGCC 600
Db 541 TGGTGTGCGTGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCAACCGTGGCC 600
QY 601 TGATGGCGCCCAACATGACGCGCCAGGCGGTTCCGCTGTGCGCAGCGGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATGACGCGCCAGGCGGTTCCGCTGTGCGCAGCGGCGCGCTGG 660
QY 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
Db 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705

```

```

RESULT 8
US-09-285-306-12
; Sequence 12, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0

```

```

; SEQ ID NO 12
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-12

Query Match      98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3.3e-153;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTTCRGTCGTGGCGG 60
Db 1 CCAGAGCTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTTCAGTCGTGGCGG 60
QY 61 CGATCAAGAGTCTTTCGGCACCAGCAGCTGTCCAGTTCATGACACAGACCAACCCGC 120
Db 61 CGATCAAGAGTCTTTCGGCACCAGCAGCTGTCCAGTTCATGACACAGACCAACCCGC 120
QY 121 TGTGGGTCTGACCCACAAAGCGCCGCTGTCCGCGCTGGGCGGCTGTGTCCCGG 180
Db 121 TGTGGGTCTGACCCACAAAGCGCCGCTGTCCGCGCTGGGCGGCTGTGTCCCGG 180
QY 181 AGCGGCCCGGCTGGAGGTCGATCGCTGACGTCACCCCTGTCACCTACCGCCGATGTGCCGA 240
Db 181 AGCGGCCCGGCTGGAGGTCGATCGCTGACGTCACCCCTGTCACCTACCGCCGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCGGTGTATGCGCGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCGGTGTATGCGCGG 300
QY 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGTGACAGGTGTGGTCAACG 360
Db 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGTGACAGGTGTGGTCAACG 360
QY 361 ACGAGATCCACTACTGACCGCGCAGAGGAGACCGCCACGTSGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCGCGCAGAGGAGACCGCCACGTSGTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGCGTTCGAGAGKCCCGGCTGTGTCGCCGSAAGGCGG 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTCGAGAGKCCCGGCTGTGTCGCCGSAAGGCGG 480
QY 481 GCGAGTTCGAGTACGTGCGCTCGTCCGAGTGGACTACATGACAGCTGTGCGCGCCAGA 540
Db 481 GCGAGTTCGAGTACGTGCGCTCGTCCGAGTGGACTACATGACAGCTGTGCGCGCCAGA 540
QY 541 TGGTGTGCGTGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCAACCGTGGCC 600
Db 541 TGGTGTGCGTGCCACCGCGATGATCCCGTTCCTCGAGCACGACGCAACCGTGGCC 600
QY 601 TGATGGCGCCCAACATGACGCGCCAGGCGGTTCCGCTGTGCGCAGCGGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATGACGCGCCAGGCGGTTCCGCTGTGCGCAGCGGCGCGCTGG 660
QY 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
Db 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705

```

```

RESULT 9
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0

```

```
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-13

Query Match      98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3.3e-153;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCGRGTCTGGGG 60
Db 1 CCCAGGACGTGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCAGTCTGGGG 60

Qy 61 CGATCAAGGAGTTCCTTCGGCACACGCGAGCTGTCCAGTTTCATGACCAACACCGC 120
Db 61 CGATCAAGGAGTTCCTTCGGCACACGCGAGCTGTCCAGTTTCATGACCAACACCGC 120

Qy 121 TGTCCGGTCTGACCCACAAAGCGCCCTGTCCGCGCTGGGCCCGGGTGTCTGTCCGG 180
Db 121 TGTCCGGGCTCACCCACAAAGCGCCCTGTCCGCGCTGGGCCCGGGTGTCTGTCCGG 180

Qy 181 AGCGGGCGGGCTGGAGGTCCGTGACGTGCAACCCCTGCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGGAGGTCCGTGACGTGCAACCCCTGCACTACGCGCGGATGTGCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTTCGATCGGTCGCTGTCGTGTGTAAGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTTCGATCGGTCGCTGTCGTGTGTAAGCGGG 300

Qy 301 TSAACCCGTTCGGGTTCATCGAGACCCCGTACCGCAAGGTGTCACCGTGTGTCACCG 360
Db 301 TSAACCCGTTCGGGTTCATCGAGACCCCGTACCGCAAGGTGTCACCGTGTGTCACCG 360

Qy 361 ACGAGATCCACTACCTGACCGCGAGAGGACCGCCACGTCGTGTCGCGCAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGAGAGGACCGCCACGTCGTGTCGCGCAGGCCAACT 420

Qy 421 CGCCGATCGACGACAAGGCGCGGTTCGAGAGKCCCGGGTGTGTCGCGCSAAGCGG 480
Db 421 CGCCGATCGACGACAAGGCGCGGTTCGAGAGKCCCGGGTGTGTCGCGCSAAGCGG 480

Qy 481 GCGAGGTGAGTACGTCCTGTCGAGGTGGAATACATGAGTGTGTCGCGCGCCAGA 540
Db 481 GCGAGGTGAGTACGTCCTGTCGAGGTGGAATACATGAGTGTGTCGCGCGCCAGA 540

Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGACGACGCCAACCGTGCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGACGACGCCAACCGTGCC 600

Qy 601 TGATGGGCGCCACATGACGCGCCAGGCGGTTCGCTGTCGTCGTCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCACATGACGCGCCAGGCGGTTCGCTGTCGTCGTCGTCGAGGCGCGCTGG 660

Qy 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
```

RESULT 10

```
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; FILING DATE: 1999-04-02
```

```
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14
```

```
Query Match      98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3.3e-153;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCGRGTCTGGGG 60
Db 1 CCCAGGACGTGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCAGTCTGGGG 60

Qy 61 CGATCAAGGAGTTCCTTCGGCACACGCGAGCTGTCCAGTTTCATGACCAACACCGC 120
Db 61 CGATCAAGGAGTTCCTTCGGCACACGCGAGCTGTCCAGTTTCATGACCAACACCGC 120

Qy 121 TGTCCGGTCTGACCCACAAAGCGCCCTGTCCGCGCTGGGCCCGGGTGTCTGTCCGG 180
Db 121 TGTCCGGGCTCACCCACAAAGCGCCCTGTCCGCGCTGGGCCCGGGTGTCTGTCCGG 180

Qy 181 AGCGGGCGGGCTGGAGGTCCGTGACGTGCAACCCCTGCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGGAGGTCCGTGACGTGCAACCCCTGCACTACGCGCGGATGTGCCGA 240

Qy 241 TCGAGACCCCGAGGGTCCCAACATCGGTTCGATCGGTCGCTGTCGTGTGTAAGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTTCGATCGGTCGCTGTCGTGTGTAAGCGGG 300

Qy 301 TSAACCCGTTCGGGTTCATCGAGACCCCGTACCGCAAGGTGTCACCGTGTGTCACCG 360
Db 301 TSAACCCGTTCGGGTTCATCGAGACCCCGTACCGCAAGGTGTCACCGTGTGTCACCG 360

Qy 361 ACGAGATCCACTACCTGACCGCGAGAGGACCGCCACGTCGTGTCGCGCAGGCCAACT 420
Db 361 ACGAGATCCACTACCTGACCGCGAGAGGACCGCCACGTCGTGTCGCGCAGGCCAACT 420

Qy 421 CGCCGATCGACGACAAGGCGCGGTTCGAGAGKCCCGGGTGTGTCGCGCSAAGCGG 480
Db 421 CGCCGATCGACGACAAGGCGCGGTTCGAGAGKCCCGGGTGTGTCGCGCSAAGCGG 480

Qy 481 GCGAGGTGAGTACGTCCTGTCGAGGTGGAATACATGAGTGTGTCGCGCGCCAGA 540
Db 481 GCGAGGTGAGTACGTCCTGTCGAGGTGGAATACATGAGTGTGTCGCGCGCCAGA 540

Qy 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGACGACGCCAACCGTGCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGACGACGCCAACCGTGCC 600

Qy 601 TGATGGGCGCCACATGACGCGCCAGGCGGTTCGCTGTCGTCGTCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCCACATGACGCGCCAGGCGGTTCGCTGTCGTCGTCGTCGAGGCGCGCTGG 660

Qy 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGCGGACGT 705
```

RESULT 11

```
US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
```

; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-16

Query Match 98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3.3e-153;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;
QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCRGTCGTGGCGG 60
DB 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60
QY 61 CGATCAAGAGTTCCTTCGGGACACGACGAGTGTCCAGTTCATGACACGAAACAACCCGC 120
DB 61 CGATCAAGAGTTCCTTCGGGACACGACGAGTGTCCAGTTCATGACACGAAACAACCCGC 120
QY 121 TGTGGGTCTGACCAACAGCCGCTGTCCGCGCTGGCGGCTGGCGTGGTCTGTCCCGG 180
DB 121 TGTGGGGCTCAACCAAGCCGCTGTCCGCGCTGGCGGCTGGCGTGGTCTGTCCCGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGATGACGTCACCGTCSCACTACGCGCGGATGTGCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCGCGGAGTGCACCGCTCCACTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGTTCCAAATCGGTCTGATCGGCTCGCTGTGGTGTAYGCGCGG 300
DB 241 TCGAGACCCCGAGGTTCCAAATCGGTCTGATCGGCTCGCTGTGGTGTATGCGCGG 300
QY 301 TSAACCCGTTCCGTTTCAGAGACCCGTAACGCAAGGTGTGCAAGGTGTGGTCAAG 360
DB 301 TSAACCCGTTCCGTTTCATCGAGACCCGTAACGCAAGGTGTGCAAGGTGTGGTCAAG 360
QY 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACCTGTCGTCGCGAGGCGCAACT 420
DB 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACCTGTCGTCGCGAGGCGCAACT 420
QY 421 CGCCGATCGACAAAGGCGCGTTCCGAGGAGKCCCGGCTGTGGTCCGCGSAAAGCGG 480
DB 421 CGCCGATCGACAAAGGCGCGTTCCGAGGAGGCGCGGCTGTGGTCCGCGSAAAGCGG 480
QY 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGACTACATGACGTCGTCGCGCGCCAGA 540
DB 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGACTACATGACGTCGTCGCGCGCCAGA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTTCTGAGCAGCAGACCGTGGCCC 600
DB 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTTCTGAGCAGCAGACCGTGGCCC 600
QY 601 TGATGGGCGCCAAATGACGAGCCGAGGCGTTCCGTCGTCGCGAGGCGCGCTGG 660
DB 601 TGATGGGCGCCAAATGACGAGCCGAGGCGTTCCGTCGTCGCGAGGCGCGCTGG 660
QY 661 TGGGCAACCGGATGGAGCTGCGCGGCGATCGACGCGGACGT 705
DB 661 TGGGCAACCGGATGGAGCTGCGCGGCGATCGACGCGGACGT 705

RESULT 12
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match 98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3.3e-153;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;
QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCRGTCGTGGCGG 60
DB 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG 60
QY 61 CGATCAAGAGTTCCTTCGGGACACGACGAGTGTCCAGTTCATGACACGAAACAACCCGC 120
DB 61 CGATCAAGAGTTCCTTCGGGACACGACGAGTGTCCAGTTCATGACACGAAACAACCCGC 120
QY 121 TGTGGGTCTGACCAACAGCCGCTGTCCGCGCTGGCGGCTGGCGTGGTCTGTCCCGG 180
DB 121 TGTGGGGCTCAACCAAGCCGCTGTCCGCGCTGGCGGCTGGCGTGGTCTGTCCCGG 180
QY 181 AGCGGCGCGGCTGGAGTTCGATGACGTCACCGTCSCACTACGCGCGGATGTGCCGA 240
DB 181 AGCGGCGCGGCTGGAGTTCGCGGAGTGCACCGCTCCACTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGTTCCAAATCGGTCTGATCGGCTCGCTGTGGTGTAYGCGCGG 300
DB 241 TCGAGACCCCGAGGTTCCAAATCGGTCTGATCGGCTCGCTGTGGTGTATGCGCGG 300
QY 301 TSAACCCGTTCCGTTTCATCGAGACCCGTAACGCAAGGTGTGCAAGGTGTGGTCAAG 360
DB 301 TSAACCCGTTCCGTTTCATCGAGACCCGTAACGCAAGGTGTGCAAGGTGTGGTCAAG 360
QY 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACCTGTCGTCGCGAGGCGCAACT 420
DB 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACCTGTCGTCGCGAGGCGCAACT 420
QY 421 CGCCGATCGACAAAGGCGCGTTCCGAGGAGKCCCGGCTGTGGTCCGCGSAAAGCGG 480
DB 421 CGCCGATCGACAAAGGCGCGTTCCGAGGAGGCGCGGCTGTGGTCCGCGSAAAGCGG 480
QY 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGACTACATGACGTCGTCGCGCGCCAGA 540
DB 481 GCGAGTCCAGTACGTCCTCGTCCGAGGTGACTACATGACGTCGTCGCGCGCCAGA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTTCTGAGCAGCAGACCGTGGCCC 600
DB 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTTCTGAGCAGCAGACCGTGGCCC 600
QY 601 TGATGGGCGCCAAATGACGAGCCGAGGCGTTCCGTCGTCGCGAGGCGCGCTGG 660
DB 601 TGATGGGCGCCAAATGACGAGCCGAGGCGTTCCGTCGTCGCGAGGCGCGCTGG 660
QY 661 TGGGCAACCGGATGGAGCTGCGCGGCGATCGACGCGGACGT 705
DB 661 TGGGCAACCGGATGGAGCTGCGCGGCGATCGACGCGGACGT 705

RESULT 13
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.

:	APPLICANT:	Drenkow, Jorg
:	APPLICANT:	Affymetrix, Inc.
:	TITLE OF INVENTION:	Mycobacterial rpoB Sequences
:	FILE REFERENCE:	018547-018570US
:	CURRENT APPLICATION NUMBER:	US/09/285,306A
:	CURRENT FILING DATE:	1999-04-02
:	EARLIER APPLICATION NUMBER:	US 60/080,616
:	EARLIER FILING DATE:	1998-04-03
:	NUMBER OF SEQ ID NOS:	181
:	SOFTWARE:	FastSeq for Windows Version 3.0
:	SEQ ID NO 17	
:	LENGTH:	705
:	TYPE:	DNA
:	ORGANISM:	Mycobacterium avium
:	US-09-285-	306-17

Query Match	97.8%;	Score 689.4;	DB 9;	Length 705;
Best Local Similarity	97.9%;	Pred. No. 7.9e-153;		
Matches	690;	Conservative	7;	Mismatches 8; Indels 0; Gaps 0;

Qy	1	CCGAGGACGTGGAGCGCATCACCGCAGACCCTTGATCAACATCCGTCRCGTCTGTGGCGG	60
Db	1	CCCAGGACGTGGAGCGCATCACCGCAGACCCCTGATCAACATCCGTCACGTCGTGGCGG	60
Qy	61	CGATCAAGGAGTTCTTCCGCACACGACGACGTCGCCAGTTCATCGACCGACGAACACCCG	120
Db	61	CGATCAAGGAGTTCTTCCGCACACGACGACGTCGCCAGTTCATCGACCGACGAACACCCG	120
Qy	121	TGTCGGGTCTGACCCACAAGCGCCGCTGTGCGCGCTGGGCCCGGGTGGTCTGTCCCCGGG	180
Db	121	TGTCGGGGCTCACCCACAAGCGCCGCTGTGCGCGCTGGGCCCGGGTGGTCTGTCCCCGGG	180
Qy	181	AGCGGGCGGCGCTGGAGTCCGTGACGTGCACCCGTCSCACTACGGCCGAGATGTGCCGA	240
Db	181	AGCGGGCGGCGCTGGAGTCCCGACGTGCACCCGTCCCACACTACGGCCGAGATGTGCCGA	240
Qy	241	TCGAGACCCCGAGGGTCCCAAATCGTCTGATCGGCTGCTCTCGTGTGTAAGCGCGGG	300
Db	241	TCGAGACCCCGAGGGTCCCAAATCGTCTGATCGGCTGCTCTCGTGTGTAAGCGCGGG	300
Qy	301	TSAAACCGGTCGGTTCATCGAGACCCCGTACCGCAAGTGGTGCACGGTGTGGTCAACG	360
Db	301	TCAACCGGTCGGTTCATCGAGACCGGTACCGCAAGTGGTGCACGGGTCGTCAACG	360
Qy	361	ACGAGATCCACTACTACGCCGACGAGAGGACCGCCACGTSCTGSGCGCAGGCCAACT	420
Db	361	ACGAGATCCCACTACTACGCCGACGAGAGGACCGCCACGTSCTGSGCGCAGGCCAACT	420
Qy	421	CGCCGATCGACGACAAAGGCGCGTTTCAGAGAGKCCCGGTGCTCGTCCGCCGAAGCGG	480
Db	421	CGCCGATCGACGACAAAGGCGCGTTTCGCGAGGCGCCGGGTGCTGTCGCGCCGAAGCGG	480
Qy	481	GCGAGGTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGACGTGTGCGCGCGCAGA	540
Db	481	GCGAGGTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGACGTGTGCGCGCGCAGA	540
Qy	541	TGGTGTCCGTGGCCACCGCATGATCCGTTCTTCGAGCAGCAGCGCCAAACCGTGGCC	600
Db	541	TGGTGTCCGTGGCCACCGCATGATCCGTTCTTCGAGCAGCAGCGCCAAACCGTGGCC	600
Qy	601	TGATGGGCGCCAACATGACGGCCAGGCGGTTCCGCTGGTCGACGAGCGCGCGCTGG	660
Db	601	TGATGGGCGCCAACATGACGGCCAGGCGGTTCCGCTGGTCGACGAGCGCGCGCTGG	660
Qy	661	TGGGCAACGGGATGGAGTCCGCGCGCGATCGACGCGCGGACGT	705
Db	661	TGGGCAACGGGATGGAGTCCGCGCGCGATCGACGCGCGGACGT	705

```

; GENERAL INFORMATION:
; APPLICANT: Girgeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: Fast-SEQ for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
;
US-09-285-306-3

Query Match          96.9%; Score 683; DB 9; Length 705;
Best Local Similarity 96.9%; Pred. No. 2.5e-151;
Matches 683; Conservative 10; Mismatches 12; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCTCGTGTGGCGG 60
Db 1 CCCAGGACGTGGAGGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCTCGTGTGGCGG 60

Qy 61 CGATCAAGGAGTTCTTCGGCACGACGACGTGTCCGAGTTCATGACACGAAACACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACGACGACGTGTCCGAGTTCATGACACGAAACACCCGC 120

Qy 121 TGTCTGGGTCTGACCCACAAGCGCGCTGTCTGGCGCTGGGCCCGGGTGGTCTGTCTCCGGG 180
Db 121 TGTCTGGGTCTGACCCACAAGCGCGCTGTCTGGCGCTGGGCCCGGGTGGTCTGTCTCCGGG 180

Qy 181 AGCGGGCCGCGCTGGAGGTCCTGAGTGTCACCGCTGCACCTACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGGCCGCGCTGGAGGTCCTGAGTGTCACCGCTGCACCTACTACGCGCGGATGTGCCGA 240

Qy 241 TCAGAGACCCCGAGGGTCCCAAATCGTCTGATCGCTCGCTGTGGTGTATGCGCGGG 300
Db 241 TCAGAGACCCCGAGGGTCCCAAATCGTCTGATCGGCTCGCTGTGGTGTATGCGCGGG 300

Qy 301 TSAACCCGTTTCGGGTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACGGTGTGTGTACCG 360
Db 301 TSAACCCGTTTCGGGTTCATCGAGACCGCGTACCGCAAGGTGGTTCGACGGGCTGTGTACCG 360

Qy 361 ACAGATTCCTACTGACCGCGCAAGAGAGACCGCAGTGTGTCGCGCAGGCCCAACT 420
Db 361 ACAGATTCCTACTGACCGCGCAAGAGAGACCGCAGTGTGTCGCGCAGGCCCAACT 420

Qy 421 CGCGATTCGACGACGAGGGCGGTTCGAGAGACCGGGTGTGGTTCGCGCGGAAAGCGG 480
Db 421 CGCGATTCGACGAGGGCGGTTCGCGAGGCGCGGTTCGCGAGGCGCGGTTCGCGCGGAAAGCGG 480

Qy 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTGTGCCCGCGCAGA 540
Db 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTGTGCCCGCGCAGA 540

Qy 541 TGTGTCTGGTGGCCACCGGATGATCCGTTCTCGAGGACGACGACGCAACCGTGCCT 600
Db 541 TGTGTCTGGTGGCCACCGGATGATCCGTTCTCGAGGACGACGACGCAACCGTGCCT 600

Qy 601 TGATGGCGCCAAATGACGCGCAGCGGTTCCGTTGTGTCGACGAGGCGCGCTGG 660
Db 601 TGATGGCGCCAAATGACGCGCAGCGGTTCCGTTGTGTCGACGAGGCGCGCTGG 660

```

Qy 661 TGGGCACCGCATGGAGCTGCGCGGCGCGATCGACGCCGGCGACGT 705
|||||
Db 661 TGGGCACCGCATGGAGCTGCGCGGCGCGATCGACGCCGGCGACGT 705

RESULT 15

```

US-09-285-306-11
; Sequence 11, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-11

```

Query Match	96.9%	Score 683;	DB 9;	Length 705;
Best Local Similarity	97.3%;	Pred. No. 2.5e-151;		
Matches 686;	Conservative 6;	Mismatches 13;	Indels 0;	Gaps 0;
Qy	1	CCGAGGACGTGGAGGCGATCACCGCAGACCTCATCAACATCGTCCRCGTCTGTGGCGG	60	
Db	1			
Qy	61	CGATCAAGGAGTTCCTTGGCCACCAAGCCAGCTGTGCCAGTTCATGGACCAGAACACCCGC	120	
Db	61			
Qy	121	TGTCGGGTCTGACCCCAAGCGCCGCTGTGCGGCGCTGGGCCCGGGTGGTGTGTGCCGGG	180	
Db	121			
Qy	181	AGCGGGCGGCGCTGGAGTTCGTGACGTCGACCCGTCSCATACGGCCGGATGTGCCCGA	240	
Db	181			
Qy	241	TCGAGACCCCGGAGGGTCCCAACATCGTCTGTATCGGCTCGCTGTCTGTGTATGCGCGGG	300	
Db	241			
Qy	301	TSAAACCGGTCGGGTTCATCGAGACCCCGTACCGCAAGTGGTGCACGCTGTGTGTACCG	360	
Db	301			
Qy	361	ACGAGATCCACTACTGACCCCGCAGAGGAGACCGCCACGTSGTGGCGCAGGCCAACT	420	
Db	361			
Qy	421	CGCCGATCGACGACAAAGGGCCGGTTCGAGGAGKCCCGGGTCTGGTCCGCCGSAAGGCGG	480	
Db	421			
Qy	481	GCGAGGTCGAGTACGTCGCCCTCGTCCGAGGTGGACTACATGGACGTGTGCGCGCGCCAGA	540	
Db	481			

This Page Blank (uspto)